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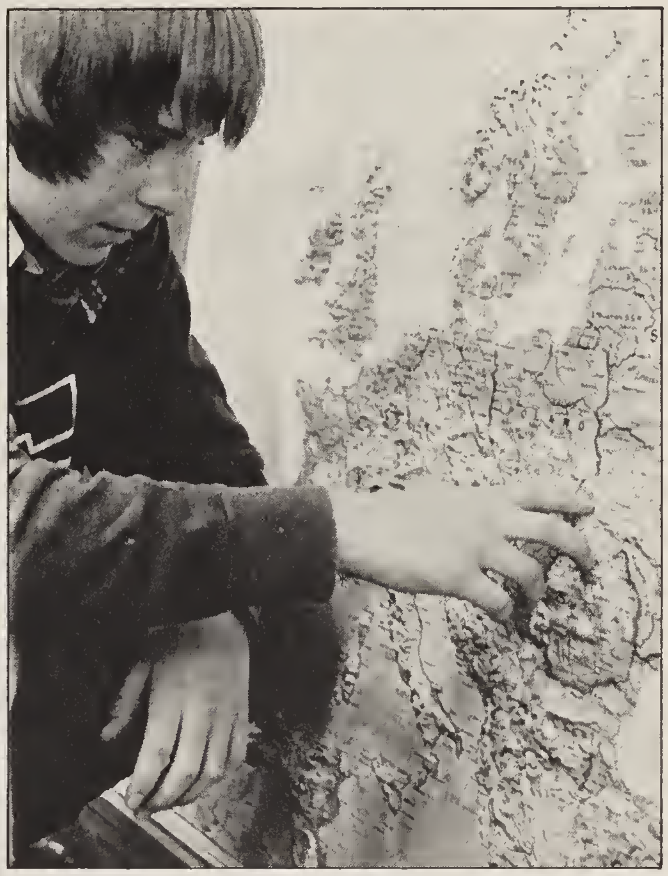
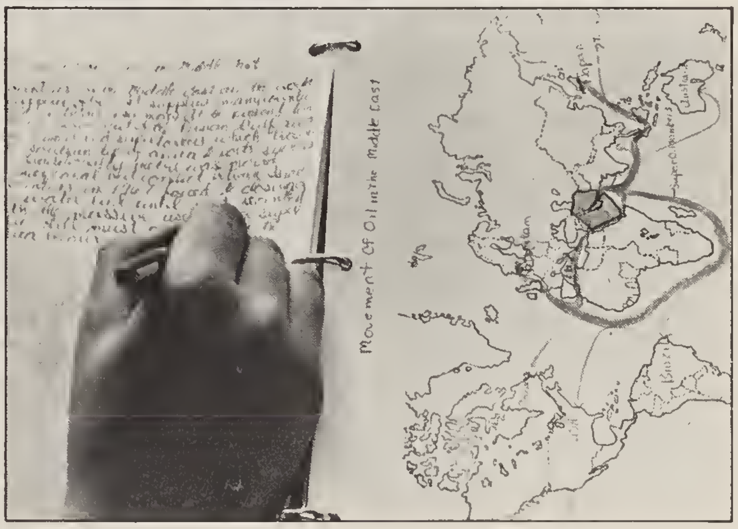
Curriculum Guideline for the
Intermediate Division

GEOGRAPHY

1977




Movement Of Oil in the Middle East

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Introduction

Studies in geography involve people, their environments, and the interaction of these two. Students entering the Intermediate Division in Ontario schools have generally acquired first-hand experience of only a small percentage of the earth's surface. Although their opportunities for travel and their exposure to the many means of communication may have been greater than those of any previous generations, their world is correspondingly more complex and in a state of constant change. In order to broaden their knowledge of the earth, students need to seek clarification of the patterns and processes that result from the interaction of people and their environments.

To accomplish this, students face no simple task. The earth is enormously complex, and patterns and processes are often obscured by vast amounts of detail. It is important, therefore, that studies in geography have a definite purpose, maintain clear points of view, and promote precise thinking. Without these elements, they tend to become an inventory of the earth's contents rather than a search for satisfactory explanations of the interrelationships of people and their environments.

Both the social and physical sciences are used in geographic studies. Geography is a social science because it involves the study of people and how they live. As people organize their activities over the earth's surface, they modify the landscape in many ways. Political systems, economic objectives, and technological competence are just a few of the factors that affect the way in which the earth is used to meet human needs.

Geographic studies also employ knowledge gained from the physical sciences. In any given area, the climate, bedrock, surface features, and soils encourage or put constraints on human activities. Choices are restricted by environmental factors. People are not completely controlled by their environment, but by the same token, they do not have complete mastery over the environment either. Recognition of this relationship will provide the basis for a broad range of studies in geography. Throughout their experience in the Intermediate Division, students should be encouraged to incorporate both the human and physical dimensions of geography into their studies.

Learning involves the acquisition or revision of knowledge, the formation or reinforcement of attitudes, and the development or practice of skills. Teachers should be conscious of the particular contributions that studies in geography can make to these processes. In their organization, planners should ensure that courses and units undertaken by students are founded on well-defined ideas and principles. To be successful, every course, every unit, and every lesson should have a defined purpose and direction.

Four courses constitute the Geography program in the Intermediate Division:

1. North American (to be taken by students in grades 7-8)
2. The Southern Continents (to be taken by students in grades 7-8)
3. Canada (to be taken by students in grades 9-10)
4. Europe and Asia (to be taken by students in grades 9-10)

They provide opportunities to acquire a basic understanding of the ways in which people interact with their environments in all areas of the world. Each course states the objectives for a year's work. The core statements, however, should not be interpreted as the only objectives. Descriptions of courses provide suggestions to assist planners in identifying and achieving additional expectations beyond the core program. This flexibility will allow the development of unique courses while maintaining balance.

During the Intermediate years, most students attend more than one school and experience more than one form of school organization. Coöperation among local schools in establishing an appropriate progression of courses will help students to discover new horizons and gain fresh insights in each year of the Intermediate Division.

To allow flexibility for local decisions, course planners and administrators can choose the order in which *North America* and *The Southern Continents* are placed in grades 7 and 8. Similarly, *Canada* or *Europe and Asia* can be designated in either sequence in grades 9 and 10.

A course based on the core expectations of the course in Canadian geography meets the requirements for a Canadian Studies credit for Secondary School Graduation Diploma purposes.

Aims for the Intermediate Geography Program

All programs and courses should encourage student growth toward:

- understanding the local community as an example of the response of people to the opportunities and constraints of their environment;
- knowledge of the province and the country, and the response of Canadians to the opportunities and constraints presented by the Canadian expanse;
- recognition of current landscapes as one stage in an evolutionary process resulting from physical forces and human activities;
- understanding the dependency of people on the environment to meet basic human needs such as food and shelter and to satisfy desires for acceptable levels of living;
- understanding location as a factor in human settlement and use of the earth;
- understanding the opportunities and constraints of environments in selected areas of the earth;
- understanding human responses to a variety of environments based on differences in values, cultures, social organizations, economic systems, and political structures;
- recognition of the aspirations of all people for acceptable levels of living;
- understanding the degree of interdependence among people in using the earth's resources to meet human needs;
- recognition of human population patterns as they relate to and affect environments;

— recognition of individual and collective responsibility in the use of human and natural resources;

— appreciation and enjoyment of the variety, complexity, and aesthetic qualities of human and natural environments;

— clear, precise communication with others in a variety of ways, with emphasis on graphic forms.

Planning Units and Courses

Educators will recognize that students in this division represent an immense range of abilities and levels of maturity. Furthermore, each student experiences a unique pattern of physical, emotional, and intellectual growth during the adolescent years. For these reasons, this guideline is sufficiently broad to encompass the full range of student needs across our province. Local planners have the responsibility to develop programs and courses to meet the particular needs of students in schools within their jurisdiction. Although expectations for mastery of content, depth of understanding, and competence in skills may be modified to allow each student to progress in a manner consistent with his or her ability and maturity, all courses must retain a focus on the goals and objectives of geographic studies as described in this guideline.

In the organization of courses, the unit of study is considered as the basic building block. Units can be of varying lengths, so that the number making up a course could vary widely, but most will occupy two to six weeks. A unit system provides a flexible form of course organization and will permit courses to be organized over a full year or part of the year. Each unit allows for the development of specific objectives under the general headings of knowledge, attitudes, and skills. Units selected to constitute a year's work in geography should relate logically to one another to create an integrated whole.

A number of stages are necessary in the development of balanced courses of study. Each course should have broad general objectives. Initially, reference should be made to the expectations for core learning and skill development identified for each course. Consideration could then be given to additional objectives that are important to provide a balanced treatment of the areas of the earth under study.

The second stage involves the choice and design of units of study to meet the broad objectives. To assist in this process, a number of suggestions for choice of content and appropriate teaching strategies have been provided for each course of study. While these are not intended to exclude other choices, planners may find them useful as starting points. In geographic studies, there is a variety of valid approaches to the organization of units including regional studies, comparative studies, studies based on issues, themes, or topics, and studies that examine processes. Similarly, many different teaching strategies can be employed to enable students to increase their understanding and skills.

A teacher's plan for a unit should include the following essential features:

— statement of specific objectives

— selection and organization of content

— suggested teaching strategies

— a description of available teaching and learning resources

— an indication of the evaluation techniques

Some objectives, content, resources, and teaching strategies can change as a unit develops in the classroom. Teachers should be prepared to make alterations in day-to-day activities provided the objectives of the unit remain in focus. Where changes are made, evaluation techniques will have to be modified to recognize these revisions in the unit plan. Such changes should be incorporated in future presentations of the unit.

Courses based on broad units will encourage co-operation among teachers in different subject fields to develop integrated themes or interdisciplinary approaches. An examination of other current Intermediate Division curriculum guidelines will reveal numerous opportunities for relating subjects that deal with similar topics. Artists and poets, for example, show a keen awareness of landscape. Novelists and dramatists recognize the significance of location in the development of character and plot. Besides being raw materials for industry, metals have physical properties, geological associations, and historical significance. These are only a few examples of the many natural associations that occur among subjects. Where themes, issues or concerns become the focus of units of work, the breadth of a study can be increased.

An important outcome of co-operative planning among teachers can be student recognition of the value of a variety of viewpoints in dealing with a topic. On many issues, even knowledgeable persons hold widely varying viewpoints. Students should get opportunities to see how approaches to issues vary according to the perspectives, values, and objectives of individuals or groups.

Students should be involved in the planning process. Teachers, however, have the responsibility to see that a balanced set of objectives is reached. Careful organization by teachers will ensure that studies are suited to the interests and capabilities of students, that the time allocated to the pursuit of a study is consistent with its objectives, and that a variety of methods and viewpoints are employed from unit to unit.

A unit on locality studies is included in each of the sections on North America and Canada. This unit is intended to encourage the acquisition of knowledge, skills, and attitudes that will enable students to relate studies of other places to the environments with which they are familiar.

Skills of investigation in the field are an essential part of geographic studies. A great variety of field experience is possible and no one type can be singled out as best. All studies, however, should be significant to students, well planned, and integrated into work being done in the classroom.

Locality studies provide many opportunities to employ field-study techniques. There are occasions when a half-hour in the vicinity of the school will secure adequate obervations. Half and full-day programs enable students to go farther afield and obtain more detail for examination. Longer trips can put students into physical and cultural environments that are markedly different from their own.

As students undertake studies of more remote environments, their experience with, and understanding of data collection become more important. Increasingly, they rely on information that comes in abstract forms. Familiarity with techniques of mapping, sketching, taking photographs, interviewing, and writing will help to make the selection and interpretation of data provided by others more vivid and significant.

The Program

I. North America

A continent is studied to discover and interpret broad patterns of physical, cultural, and economic geography.

The landscapes of North America were virtually undisturbed for centuries. The native peoples who inhabited the land adapted to the opportunities offered for sustaining life and organizing society. They developed unique cultures in the forests, plains, mountains, deserts, and coastal regions that they occupied without upsetting the natural balance or drastically changing the landscape.

In this year, students study North America as it is today. The arrival of large numbers of European immigrants beginning in the seventeenth century brought new political systems, new attitudes and values, and new technologies to produce a series of complex changes in the landscape. In most areas today, students will find only a few traces of the natural landscape and the culture of native peoples.

For the purpose of this guideline, North America is considered to include Canada, continental United States, Central America, and the Caribbean Islands. Courses developed from this section should refer to each of these areas. The themes that follow suggest ways of developing a balanced course to meet a variety of planning needs.

In addition to the study of broad patterns selected from examples of physical, cultural, and economic geography, students should gain insights into their own communities. The areas in which students live can provide immediate examples of the many ways in which people interact with their environment to change the landscape.

Core content

Through selection and organization of appropriate studies of North America, teachers should provide students with opportunities to develop an understanding of:

- human and natural characteristics that make the local community and area unique;
- relationships between the community and the rest of the province, Canada, North America, and the world;

- the location and extent of North America and the relative locations of the countries within the continent;
- major political units comprising North America;
- characteristics of the major landform regions and drainage systems;
- factors contributing to climatic variations in North America and weather patterns in Ontario;
- major historical and geographical factors that have influenced settlement patterns;
- contributions of native peoples to the development of contemporary society;*
- present patterns of population density and distribution;
- factors affecting the location of major areas of industrial development;
- the importance of selected manufacturing activities to North American economies and ways of living;
- the interdependence which exists among various regions of North America;
- the need for wise use and management of natural resources.

Skill development

Planning for skill development should take into account the present proficiency of students and the appropriateness of skills chosen for the content being studied. In the organization and guidance of studies of North America, teachers should ensure that students are provided with opportunities to develop facility in the use of the following skills or techniques:

- using latitude and longitude, map grids, compass points, and degrees to determine location and direction;
- using atlas gazetteers to locate places;
- locating places using distance and direction from other points;
- using linear and verbal scales to measure distances on maps;
- deriving information from atlas maps of relief, climate, mineral production, transportation, population, and political divisions;
- using conventional symbols and colours to convey information and indicate boundaries;
- drawing cross-sections or profiles using atlas maps or simple contour maps;
- transferring information from a map to a cross-section to show relationships;
- presenting and deriving information from various sources such as statistics, graphs, charts, photographs, and diagrams;
- sketching simple maps to show dominant features such as landforms, transportation routes, or city locations;
- using flow diagrams to present and derive information;
- obtaining information from a variety of photo types including vertical and oblique aerial photographs.

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*Teachers seeking assistance in the organization of studies on native peoples may refer to the resource guide, *People of Native Ancestry II*, Intermediate Division.

Organizing a course on North America

The organization of units to comprise a full course can vary greatly across the province. After reviewing the expectations for core content and skill development and taking into account the students for whom the course is intended, planners will see that there are many valid approaches to the study of broad geographic patterns found in North America.

In making choices among approaches and content, it is important to strive for a balanced treatment of the material. Units should be selected to give a broad coverage rather than concentrating an undue proportion of available time on one or two regions or one or two themes. Balance can be achieved in a number of ways. One or more units should give an overview of the continent and provide opportunities to develop generalizations about relationships, for example, the relationship between population and landforms, climate and agriculture, or resources and industry. Other studies should be selected to provide explanations of human activities in selected areas. Where do people live? How do they earn their living? How is one area connected to other areas? What are the advantages and disadvantages of living in this area compared to another? Such studies can provide students with experience in working at different scales. Through choice of emphasis on physical, cultural, or economic patterns within units, balance can be achieved among the basic ideas and principles of geographic studies.

A study of the local community is an integral part of the course. A locality study will allow comparisons and contrasts of local conditions with those found in other, more distant parts of the continent. Those responsible for the development of a course should be knowledgeable about the locality study planned for the course on Canadian geography (see page 26).

The North American stage

The great landform divisions that make up the earth's crust provide the stage on which the human drama is acted out. The structure of North America provides examples of great coastal and interior plains, young peaks and ancient folds, and foundation shields and recent volcanics.

The landforms, together with the climatic patterns of North America, have influenced the ways people have occupied and developed the continent. With the aid of maps and photographs, students can see in clear detail how people use these features as they farm or fish, mine or log, develop harbours or build cities. Recognizing the broad patterns of North American landscapes and climates will be one objective of this study. Another will be relating the influence of landform types and climatic patterns to human activities.

It is the intention of this unit to give students an overview of the continent on which they live. While detailed studies are not necessary, students can examine the natural features that have come together to form distinctive regions. An examination of the major subdivisions of the physical landscape can culminate with some speculation about the potential and limitations of these areas for human activity.

Students should be encouraged to visualize the landform regions of North America. The word "cordillera", for example, should conjure images of fast-flowing rivers, rapids, transportation routes, towns and cities located in valleys, the importance of mountain-pass locations, the dryness of interior regions, the high mountains, and the great trees of the coast. The use of films, filmstrips, photographs, travel brochures, and other reference materials will assist students to develop realistic mental images.

Population patterns

Starting points for this study can be the examination of maps. The obvious atlas map is the one on population, but road maps and topographic maps can serve equally well for raising questions about where people live, or do not live.

Such a study poses many questions. How many people are involved? What do they do to earn a living? How are they supplied with food, clothing, and shelter? How is one area connected with another? Why do population densities vary from place to place? Why are some locations more attractive than others? When looking for answers, students will encounter many of the factors that influence population density and distribution.

This unit could examine early North American settlements and their gradual spread across the continent. Most European settlement began at various points along the east coast of the continent. The movement inland was influenced by a number of physical, human, and political factors. Landforms, rivers, and climate represent some of the physical problems faced by the early settlers; the human and political conflicts between the native peoples and the newcomers also influenced the location of settlements. Technological developments such as the railway, roads and vehicles, inland shipping, and air transportation shaped the pattern of later settlements.

This unit can provide an opportunity to look at settlement patterns in an organized way. Maps will show examples of settlements in North America which sprung up at the junctions of land and water routes, the head of navigation of rivers, at the entrance to passes, in coastal indentations, at the sources of water, minerals, and timber, and near recreational sites.

Students can also look at population patterns in the past to determine trends in population growth or decline. These trends will allow students to speculate about future patterns.

Locality studies

If students are to comprehend the many ways in which people interact with their environment, no area can provide more immediate examples than their own. No environment can be more convenient for discovery of patterns or explanation of processes than the one to which the students have immediate access.

Decisions on the extent and nature of local studies can be worked out satisfactorily by teachers co-operating at the local level. In some areas, a comprehensive unit on the community can be part of one year's work. In other cases, particular aspects of local geography can provide insights that will be confirmed or expanded in other studies. Comparison and contrast with local conditions is a useful way to illuminate principles that emerge from studies in other regions of North America.

Locality studies also form an important section of the work based on the Canada portion of this guideline. There must be close co-operation in the development of programs within this content base to ensure that the work is cumulative and not unduly repetitive.

Locality studies can be the most exciting and rewarding part of the year's work. It is important to emphasize the good aspects of the community as well as whose which call for improvements. Locality studies are based on reality. Students are living within the community now and many of them will spend the rest of their lives there. One of the most important aspects of the unit, therefore, is to develop attitudes of pride in, and respect for, the community.

Studies in this section could revolve around the physical geography of the region, site and situation, early history of the area, ethnic origins of settlers (who? how many? when? from where? how? why?), and how these factors have influenced the present pattern of settlement.

Sharing a continent

The benefits that North America has gained from the mingling of cultures have been enormous. These extend not only into the arts, but also into the foods we eat, the clothes we wear, and the homes we live in. We cannot overlook the contributions of the native peoples whose crafts, agricultural products, and folklore are a rich part of our heritage. The knowledge and skills of the first people proved invaluable to early settlers.

A historical approach is one way of tracing the origins of various influences in our present way of life. The part played by people from several continents can be recounted and evidence of their presence found.

Many parts of North America provide marked contrasts to the culture most Ontario students normally experience. Examining the way of life of people from polar to subtropical latitudes and across the continent will show the cultural diversity of North America.

Following are some starting points for studies within this theme:

1. *Place names*: The classification of a random selection of place names from a map of North America will give insights into settlement patterns of the Europeans as well as the areas where there was a strong native influence.
2. *Founding dates*: Class research into the founding dates of various settlements will constitute the basic data. Mapping those place names through some form of colour coding will show how the continent was opened up and point out some of the reasons for settlements springing up at particular points.
3. *Travel brochures*: Brochures on a wide variety of cultural events (for example, the Carnaval, the New Orleans Mardi Gras, and the Vera Cruz fiestas), will assist students to see the diversity of ethnic backgrounds in North America.
4. *Case studies*: A detailed look at the life-styles of relatively small groups of people such as the Mennonites, the Cajuns, the Hopi Indians, and the Choco Indians will provide a basis for research, discussion, and comparison.

Our natural heritage

The rapid occupation of space in North America has been accompanied by the intensive use of natural resources. Early settlers found an abundance of game, fish, furs, timber, minerals, and water. Now we are taking a second look to see whether our demands on nature have been reasonable.

Our forests are valuable resources : they preserve soil, conserve water, shelter wild life, and beautify the landscape. Both in the past and the present, forest resources have been vital to meet basic human needs. We must be concerned that our desire for products does not lead to abuse; the capacity of the forest to replace through growth must be maintained.

The inland waters and the surrounding seas have provided North Americans with a second natural resource — fish. Cod from Grand Banks, tuna from Southern California, salmon from British Columbia, crab from Alaska, oysters from Chesapeake Bay, and whitefish from Great Slave Lake are only a few of the products that have local, national, and international importance. Our waters are under great pressures from industry. Often our need for clean water conflicts with our need for products such as paper and petroleum and for the jobs which industry creates.

The economies of many North American communities are based upon the output of mines and petroleum wells. Some communities were founded to extract mineral wealth; some provide transportation services; and others depend on smelting and manufacturing industries. The life of these communities can undergo drastic change if ore is depleted or competition from other sources cannot be met.

North America has its share of endangered species. The sea otter, the blue whale, the whooping crane, and the peregrine falcon are examples of wild life that are under great pressures for survival. Students may be interested in learning more about these and other birds and animals in danger of extinction.

We are faced with many dilemmas. Should we permit the killing of seals in the Gulf of St. Lawrence? How can oil tankers be made safer? Should a pipeline be built? Can the lumber man and the camper live in harmony? Can we have jobs and a clean environment? Some of our attitudes towards our resources and the practices we must adopt to get maximum benefit from them in the long run can be explored in this unit. Our natural heritage includes mountains, woods, and streams which have captured the imagination of many artists, poets, and writers. Resource development projects often raise questions of choice between economic growth and the quality of life. Students should distinguish between renewable and non-renewable resources and contemplate the price of unwise use.

Agriculture

Florida citrus groves, Peace Valley wheat fields, California vineyards, New England cranberry bogs, Jamaican sugar plantations, Alberta ranches, Wisconsin dairy farms, banana plantations in Costa Rica – these are only a few examples of the agricultural landscapes of North America. The characteristic features of North American agriculture can be examined through such factors as the size of farms, ownership, cropping practices, natural hazards, degree of mechanization, seasonal rhythm of work, and harvesting and marketing techniques. Distribution maps can assist in showing how land use is influenced by natural conditions to produce certain patterns. Studies of farming using comparison or contrast can be useful in determining why natural conditions are not the only factors affecting farmers. For example, dairy farming and market gardening are dependent on market location; banana growers are dependent on a reliable transportation and marketing system; and cane growers face intense competition from other producers and often have no control over the price that they receive.

This unit should encourage a total look at the North American continent. In the examples which range from the coffee plantations of Central America to the corn fields of Southern Ontario, or, from a sheep ranch in Arizona to a potato farm in Prince Edward Island, the students can be caught up in an important theme which will allow individual investigations of products or farm types. One objective could be understanding the implications of changes in agriculture in various parts of North America. The last fifty years have seen drastic changes in farming practices. Some consideration of the problems faced by modern farmers could form an integral part of the study.

The industrial giant

The massive industrial complex of North America reflects the desire and the capacity of its people to manufacture in large quantities a bewildering array of goods. Many places such as Detroit, Seattle, and Pittsburg in the United States, and Hamilton, Oshawa, and Sarnia in Canada have become world famous for the volume of production of particular products. This theme should give an overview of the tremendous capacity of North American industry for mass production. While detailed studies of all industries are impossible, those responsible for planning programs of study will want to select certain examples for detailed examination to provide generalizations that can be applied to various other examples. Perhaps a local industry will provide a good choice for study.

Industry in North America can be studied for: location; the reasons behind a particular location; the relationships between regions; and the modes of transportation which link industrial regions. At the same time, students should become more aware of the characteristics of certain of the industrial regions, and their specialization in certain types of goods.

Following are a number of starting points which might prove useful as approaches to the study of industry in North America.

1. Trace a mineral resource, for example, iron ore, through all stages of manufacture to a finished product: mining, pelletizing, transportation modes, the smelting process (including assembly of other raw materials), and the processes which result in a product such as an automobile.
2. Categorize employment as primary, secondary, or tertiary.
3. Hypothesize about the impact of a new industry in your community.
4. Attempt to find patterns of location for selected industries such as textiles, automobiles, oil refining, milling, electronics, or meat packing.

Weather

Ontario experiences some of the world's least predictable weather patterns. Seldom does a week pass without significant changes in insolation, winds, temperatures, and humidity. Such frequent changes result from the arrival of air masses from other parts of North America and adjacent water bodies. Each air mass brings its characteristic weather conditions. Confrontations between different air masses provide the conditions for frequent storms.

The study of weather maps will give students some facility in predicting weather. They will get a better understanding of the sources of air masses and the routes that such air masses often take. Discovery of how changeable our weather is can begin with the collection of weather maps which appear daily in a number of newspapers, and with the daily recording of data over a period of time. The translation of data into line graphs will assist students to recognize patterns of weather which we can anticipate. A collection of records taken in and near the local community will set the range of what can be expected and might lead to a search for reasons why there are significant differences in weather statistics in places only a few kilometres apart.

Studies of the numerous ways in which weather phenomena influence our daily activities will show the inescapable consequences of weather on our lives. Students could be given opportunities to visit weather stations to become more familiar with the instruments that are used in the collection of data.

The topic provides many opportunities to study cause-and-effect relationships. What happens when:

- Florida citrus growers are faced with a prediction of below-freezing temperatures?
- the works department of a city is confronted with a heavy snowfall?
- a prolonged cold spell grips an energy-short region?
- a group of people on a winter outing is overtaken by a blizzard and whiteout?

Leisure time

For many people, especially those living in Canada and the United States, urbanization seems to have created not only affluence, but also the desire to escape to the land on occasion for rest and recreation. The choice of places to visit is largely determined by the variety and proximity of recreational landscapes and by individual tastes. Today, most Canadians are within hours of tourist attractions that range from the beaches of the Caribbean to the ski slopes of Utah and the goose camps of Moosonee.

Accommodating the need for recreational activities (places to ski, camp, swim, sail, canoe, fish, hike, snowmobile, and paint) creates conflicting demands on a limited amount of space and the natural environment. As a result, aesthetic and ecological factors may not receive adequate consideration in the development of facilities.

Students can begin by investigating the factors that determine the selection of sites for national, provincial, and state parks, and the requirements for such facilities as a ski complex or a hiking trail. Other studies might include the ways in which people have changed the landscape to meet recreational needs, or how technological change alters the recreational potential of various areas.

References to climate charts and statistics will enable students to see the advantages of visiting Panama in March rather than October or planning a ski trip to Colorado when the temperatures are not too low.

Leisure should not be regarded solely as travel to distant places for the purpose of recreation. We should also consider the facilities at hand, either in the city or town itself or the province. In relation to the study of leisure, students can look at the role of the volunteer, the candystriper, the camp counsellor, and the playground supervisor, and examine the definition of leisure to mean time spent away from work to rest or play. Students should be made aware of the manner in which they spend their own leisure time.

II. The Southern Continents

People interact with distinctive environments to produce patterns of development.

Certain characteristics of the southern continents provide a framework for a course of study. Because these land masses occupy areas from north of the equator to the South Pole, a variety of distinctive landscapes recur from continent to continent. These landscapes invite the examination of human responses to similar conditions in widely separated places where the inhabitants are influenced by different cultural backgrounds and have different levels of social and technological development. For the purposes of this guideline, the southern continents are considered to include South America, Africa, Antarctica, and Oceania (which includes Australia and New Zealand).

Core content

Through selection and organization of appropriate studies of the southern continents, teachers should provide students with opportunities to develop an understanding of:

- the extent and significance of oceans and land masses in the Southern Hemisphere;
- distances and directions of selected locations from Ontario and Canada;
- the earth-sun relationships underlying the distinctive patterns of world climates within areas extending approximately 30° north and south of the equator;
- climatic factors that create distinctive ecosystems within tropical forests, savannas, deserts, or Mediterranean vegetation types;
- the relationship between climate, vegetation, animal life, and soils in one or more major ecosystem;
- the importance of culture and technology in the different ways in which people make use of similar environments to meet their needs;
- the positive and negative effects of human activity on the environment, for example, clearing forests, grazing, altering water courses, depleting stocks of animal or aquatic life;

- resource development and exploitation;
- the effects of past and present migrations on the political, social, cultural, and economic organization in selected areas;
- the effects of urbanization on people in selected areas;
- factors that contribute to disparities in the quality of life and access to opportunity available to people in selected areas;
- prospects for providing basic human needs such as adequate nutrition, shelter, and health care in selected areas;
- the future of sparsely-populated areas such as deserts, tropical forests, and polar icecaps.

Skill development

Planning for skill development should take into account the present proficiency of students and the appropriateness of skills chosen for the content being studied. In their organization and guidance of studies of southern continents, teachers should ensure that opportunities are provided to develop facility in the following skills and techniques:

- using latitude and longitude, map grids, compass points, and degrees to determine location and direction;
- using distance and direction from some places to locate other places;
- using linear and verbal scales to measure distance;
- selecting and deriving information from atlas maps of climate, vegetation, agriculture, resources, land use, and population;
- using conventional map symbols and colours to show quantities and distribution;
- using line, bar, and circle graphs to derive and present statistical information, including climatic data;
- using flow charts and diagrams to present and derive information;
- deriving information from a variety of photographs including vertical and oblique aerial photographs;
- drawing simple sketch maps or diagrams from photographs or maps;
- combining information from two or more maps to show relationships;

Organizing a course on the southern continents

The immense scope of content choices possible within a study of the southern continents makes it necessary to plan the year's work carefully and to use available time wisely. The teacher must strike a balance between developing in-depth units at the expense of variety, and covering a greater number of units at a superficial level.

It is important to develop units which take the student across all the southern continents rather than concentrating on regional studies within individual continents.

Planners should include one or more topics that will provide an overview of the land masses and make it possible to explore some recurring patterns.

The year's work should also focus on an examination of the contrasts between continents and within individual countries. Examples of contrasts might include rich and poor, dense and sparse, developed and underdeveloped, urban and rural, and modern and traditional environments. The different ways in which people use similar environments can also be considered.

Some units will provide opportunities to develop specific geographical skills. An atlas can be an invaluable tool in identifying patterns that recur from continent to continent. The need to increase the student's ability to use the atlas effectively may suggest the choice of a particular theme.

Patterns on the map

Reference to atlas maps will show patterns that emerge from mapping such diverse information as climatic characteristics, vegetation types, population distribution and densities, and trade volumes. The southern continents provide excellent examples: the climatic pattern in Africa points to the significance of its location astride the equator; population concentrations occur along the coasts of Australia, New Zealand, and South America; sea routes connect the southern continents with their trading partners; the locations of recent earthquakes and volcanic activity reveal physiographic patterns. Such patterns are found across the continents as well as within the confines of a single region.

Each pattern requires explanations. Whether the pattern is physical, cultural, or economic, the explanation provides opportunities to see broad geographic principles. In the process, students are also given the opportunity to develop mapping and research skills.

A unit based on the examination of patterns could form either the introductory or the concluding section of the year's work. It should be remembered, however, that questions arising out of patterns found on maps often set the stage for other topics. The search for patterns can follow a number of paths:

- establishing relationships between population distribution and location;
- comparing political maps from the turn of the century to those of today;
- locating disparities in income, literacy, and nutrition;
- locating regions that have similar climatic conditions;
- discovering the sources of products that find their way to Canadian homes;
- mapping the official languages of countries as clues about their histories.

Land-water relationships

Despite the emphasis on human interaction with the land, it is important for students to realize that water covers most of the earth's surface south of the equator. A look at the globe from a position above the South Pole explains why the Southern Hemisphere is called the "water hemisphere". Students may already be familiar with the routes taken by explorers such as Cook and Magellan. The great spaces between the continents and the remoteness of Oceania and Antarctica from the rest of the world could be examined to see what effect they have on transportation and communication today.

This theme can serve as an introductory unit for students to become familiar with various characteristics of the southern continents. Basic map, globe, and research skills can also be reviewed and enhanced. The following ideas can form a basis for investigating land-water relationships:

1. Every month hundreds of oil tankers are routed around the Cape of Good Hope. Where do they originate and what are their destinations? Are there any hazardous points where oil spillages could occur?
2. Maps reveal patterns of ocean currents and upwellings. How do these help to explain areas of good fishing, climatic variations, locations of certain deserts, and routes followed by early explorers and traders?
3. Trace the voyages of the Kon Tiki and Ra II. Can they be related to ocean currents and past migrations of people?
4. Introduce students to the basic idea of plate tectonics, a theory which has become widely accepted within the last few years. How can it be used to explain similarities in geological structures and fossil occurrences between continents thousands of miles apart?
5. Consider the potential of the ocean as a source of food. What effect has the hunting of whales had on total numbers and survival of various species?

Patterns of climate

Inhabitants of the southern continents experience patterns of climate with which Canadian students are not likely to be familiar. Many people in the southern continents have never known snow, some of them measure the passage of seasons by changes in rainfall rather than temperature, and others include a picnic on the beach among their Christmas festivities. As a consequence of climatic regimes, their surroundings consist of towering trees, waving grasses, or stunted scrub and brush. Patterns of tropical forest, savanna, desert, and Mediterranean woodlands are found in Australia, Africa, and South America. Canadian students will also be interested in the reversal of seasons in countries south of the equator.

Patterns develop for a variety of reasons. It is important both to seek the reasons and to see the effect of the patterns on people living within the distinctive environments.

Studies in this area should develop relationships between various sets of physical circumstances:

- latitude and temperature
- altitude and temperature
- proximity to the sea and temperature
- ocean currents and temperature
- wind direction, trend of landforms, and precipitation
- air temperature and its capacity to hold moisture
- the development of pressure cells and wind belts
- the earth-sun relationships which result in particular rhythms of temperature and precipitation

The unique character of the climate of Antarctica deserves special attention. Antarctica is a source of cold, dry air masses and cold ocean currents. Some day its icebergs may provide fresh water for more northerly locations. Students may be interested in the story of Antarctic explorations and the nature of the scientific research which is carried out in that part of the world.

Changing cultures

People's approach to providing basic needs depends on the attitudes, values, organizational skills, and technological skills that they possess. The southern continents hold many examples of environments which are seemingly adverse in the eyes of most Canadians. However, deserts, rain forests, and mountains across the southern continents hold examples of societies which have survived, although isolated from the rest of the world for hundreds of years. The Bushmen of the Kalahari, the Noanama Indians of Colombia, and the Nuba of central Sudan are examples of groups of people who have lived successfully for generations.

The case study of one or more such groups of people will give a clear understanding of how climate, relief, flora, and fauna exert strong influences on the daily lives of the inhabitants. A study of their life-style could consider shelter, food, clothing, tools and weapons, language, social organization, culture, and daily routines. The immediate effects and the possible long-term results of the outside world encroaching on these peoples should form a part of the study.

In another part of the study, students can examine the effects of events over which these peoples have no control. Brazil, for example, has embarked on a program to develop the Amazon Basin. Massive road-building projects and settlement programs are underway in the rain forests. Mining, lumber, and cattle industries are also being established. Multinational business interests have poured in great amounts of capital. The native people of Amazonia are very much under siege and their way of life will change. People who have adapted to the natural rhythm of their environment are being supplanted by others whose objectives are to change the environment.

Units developed around this theme could well be integrated with those on the study of a particular ecosystem, as outlined in the following section. Students can witness the process of human involvement in a natural ecosystem, appreciate the loss of natural heritage, and perhaps project their concerns back to Canada.

Fragile environments

The margins of deserts, slopes of mountains, and remote islands possess similar liabilities. Each is an example of a fragile environment whose ability to sustain plant and animal life is extremely vulnerable. Students can begin studies with an examination of one or more ecosystems.

An ecosystem represents the combined use by all living things of the resources provided in one place at one time. Tropical forests are excellent examples. The ready availability of heat and moisture provide ideal growing conditions and allow an incredible variety of plants and animals to flourish, including microscopic bacteria and giant trees. The forest becomes a giant recycling centre putting resources to use as soon as they become available. As a result of this rapid turnover there is little accumulation of resources.

Because people inhabit and use the resources in their environment, they must be considered as integral parts of any ecosystem. Shifting agriculture as practised over centuries allows cleared areas to regenerate in a natural way when they are abandoned. Under these conditions, the forests have persisted. In spite of this apparent indestructibility, scientists are now concerned about the capacity of rain forests for renewal if subjected to more intensive land use.

Many people in southern lands rely on much less resilient environments to meet their needs. On the margins of deserts, the capacity of the land to sustain plant and animal life is tied closely to the availability of water. Periods of drought reduce the total available food supply drastically. In the absence of water, vegetation withers, animals cannot graze, and people are forced away from their established homes. Indigenous plants disappear and are replaced with species that are poorer in stature. It may be decades before the capacity to sustain the original population densities can be restored.

Mountain slopes are ecosystems which are vulnerable to pressure from people. In the tropics, farmers hack fields out of high cloud forests that shelter unique plants. Tilling the soil on such steep slopes causes unprecedented erosion. Once a steep slope in a heavy-rainfall area is disturbed, it is almost impossible to stabilize it again.

There are thousands of islands in the world. Even the small and remote ones are now within the range of a jet plane, an oil spill, or a blanket of flotsam. Islands develop ecosystems which provide different and special relationships between plant and animal life. Mistakes that are made on a continent can be remedied; small islands with their unique ecosystems allow no margin for error.

Students should be looking at the ways in which people can live within fragile environments without causing irreparable damage to them. It is not enough that students become familiar with misadventures around the world; they should also become familiar with the problems that people are facing and the solutions that can be offered.

Modifying the environment

The exploration and rapid development of the southern continents introduced new values, attitudes, and technologies. Satisfying human needs often resulted in a modification of the environment to make it serve those needs in a more productive way. The process of modification was spurred by world demand for such resources as gold, copper, diamonds, rubber, cacoa, and palm oil.

The Aswan Dam, the Snowy Mountain Project, the Transamazonia Highway, the Trans-Chaco Highway, the Cabora Bassa project, and the Awash Basin development are examples from three continents which illustrate the scope of the modifications that have been completed or are under way. These schemes have changed the life-styles of millions of people. In some cases, developments have resulted in two worlds divided from each other by social and economic disparity but living side by side.

Students should investigate both the advantages and disadvantages of such large scale projects. The Aswan Dam, for example, has achieved a number of its planned objectives: it has prevented floods and saved crops that might have been destroyed; increased food output by turning large sections of desert into cropland; and produces more than seventy-five per cent of Egypt's hydroelectric power.

Negative effects, however, include increasing dependence on chemical fertilizers, greater incidence of water-borne diseases, erosion of delta shorelines, and reduced sardine stocks in the adjacent Mediterranean Sea. It may be many years before a true assessment of the project's worth is possible.

Clearly, the effects of projects can be both beneficial and harmful. Studies should help students see the importance of considering all the possible consequences of projects in modifying the environment before the projects begin.

Urbanization

Almost from their first discovery and colonization by Europeans, Australia, New Zealand, South Africa, and South America developed urbanized societies. Cities and towns emerged quickly, to exploit mineral deposits or to provide port facilities for the productive hinterland. The size and importance of cities was linked to the economic and political systems in Europe. In the past few decades, the process of urbanization has been speeding up in the developing nations of Africa as well.

Increasing population and a shift in population from rural to urban areas is a cause for concern in many nations. Better communication has made people more aware of life in the cities, improved transportation has made it easier to move, and shortages of land and the unreliability of food production force people to move to the city to seek employment.

Many cities have not been able to accommodate the new arrivals. As a consequence, they have large numbers of squatters, areas of makeshift housing, inadequate water and sewage facilities, and inadequate health services. Without capital or skills, their inhabitants have few prospects for improvement. Their lives are in vivid contrast to those of the affluent in other parts of the city.

Governments and other organizations are developing many innovative approaches in an attempt to solve their problems, for example, partial contruction of homes, standardization of building components, self-help schemes, and retention of rural social organizations within urban settings.

Students can compare their own cities with those in southern lands from the point of view of architecture, transportation, and land uses. Newspaper articles and periodicals provide information on life-styles including homes, clothing, food, recreation, and entertainment. Cities are usually the locations for athletic competitions, industries, educational institutions, and governments. Students may wish to investigate the reasons for establishing Brasilia, a project designed to change the goals and organization of a whole nation.

Focus on tourism

> "Tired of mundane vacations? Consider a Zambian adventure. You'll fly to Lusaka and the beginning of three thrilling weeks. The wildlife is more plentiful than ever and you will have an excellent chance of seeing scores of African wildlife species."
>
> "Noodle for opals in South Australia."
>
> "Take a steamer up the Sao Francisco River."
>
> "Separated by 600 miles of ocean from the South American mainland, each of the islands of the Galapagos archipelago is home to a unique array of flora and fauna."

Advertisements such as these could be the starting points for the study of tourism. Students in Ontario schools may be among the increasing numbers trekking to exotic parts of the world. The theme will provide interesting links between Canada and holiday areas in the southern continents, and also give opportunities for students to weigh the advantages and disadvantages that tourism brings.

Tourism means people – their noise, their litter, and their money. It means hot-dog stands besides ancient ruins, drag strips on quiet beaches, and grafitti on monuments. Tourism brings quantities of people into fragile ecosystems where signboards begin to outnumber the animals. Students can consider the impact of tourism on a culture when:

- a child posing for photographs alongside a donkey can earn more money in a day than her father;
- a hundred flashbulbs go off during a tribal ceremony;
- entire villages become the servants of more affluent people;
- it becomes impossible to take a picture of a lion without several cars in the background.

Tourism is the life blood of many regions in the world; it is a significant source of revenue in places as far apart as Kenya and Peru, and Sydney and Rio de Janeiro.

Students can consider ways in which the disadvantages of tourism can be minimized.

Production and commercial development

Ontario students may be so accustomed to the availability of products from southern lands that they take them for granted. Units of study organized within this theme have many starting points which will enable students to see some of the complexities of commodity production, the variations in production methods from region to region, and the methods by which goods are traded between countries.

Some students will be interested in following one agricultural item from farm to table. There are many examples from which to choose: coffee, cocoa, tea, bananas, ground nuts, palm oil, and sugar are all possibilities, as well as fibres like cotton, wool, and sisal. In any study, it would be important to consider: the natural requirements of the commodity; the methods of planting; harvesting and processing the crop; the competition that the product faces; and the variety of jobs that accrue in the manufacturing and transportation phases. Students can also examine the factors that affect the capabilities of southern producers to compete on world markets: the reversal of seasons; costs of production; distances from markets; fluctuations in selling prices; and changes in trade agreements.

Another interesting approach is to look at the production of one commodity that is common to the three continents – South America, Africa, and Australia. A study of livestock raising in a variety of settings across the savanna areas of the southern continents will bring students information about such diverse groups as the *llaneros* of Venezuela, the stockmen of Australia, the Botswana cattlemen, the Masai herdsmen of East Africa, and the gauchos of the Argentine pampas. All these people tend animals in different ways and for different purposes.

The theme encourages organization around a climatic type. The Mediterranean type of climate, for example, provides a common base for comparison on three of the southern continents. Studies can bring out aspects of competition in trade, similarities in land use, and the reversal of seasons in the Northern and Southern hemispheres.

Inquiry into people and issues

A unit developed within this theme could have various starting points. Depending upon student interest, the resources available, and the latest news headlines, the following topics can provide valuable experiences:

1. *Language*: The completion of a map of South America to show the official languages used will provide the incentive to look at the history of settlement on the continent – the takeover of existing empires, the intermingling of races, the development of large commercial farms, the importation of cheap labour, and the islands of affluence among seas of poverty.
2. *Ethnicity*: Nigeria has by far the largest population in Africa. This country, independent only since 1960, has three major ethnic groups: the Hausa-Fulani of the north; the Yoruba in the west; and the Ibo in the east. Students can begin by learning about the geographic base of each of the regions, and work towards conclusions that might suggest how well these groups have progressed towards a unified country.
3. *Concerns*: Many wildlife species in different parts of the world are in danger of extinction. There are some conservation measures that have met with success. Students can read magazine and newspaper articles on the subject and consider the reasons why lions, sea turtles, crocodiles, blue whales, and the African elephant are listed as endangered. They will be interested in learning what conservation measures have bettered the chances of the Australian koala and the Peruvian vicuna. Students should become knowledgeable about what is already being done, as well as what needs to be done. Mini-reserves, translocation of animals, zoo breeding, breeding farms, national parks, and game sanctuaries are examples of positive steps in conservation.

III. Canada

Contemporary Canada reveals strengths, weaknesses, and opportunities for the future.

Canada is many things to many people. To some, Canada is a land of great diversity – rolling plains, rugged mountains, endless forests, broad rivers, and frozen tundra. There is a Canada of the wilderness – a country with few inhabitants, a land of incredible vastness and beauty. There is rural Canada – a land of ranches, farms, orchards, and irrigated fields, with settlements along shores and highways or outposts linked tenuously by bush roads. There is urban Canada – a multicultural society of people with different origins, languages, religions, values, and social customs, a country that can be described as a mosaic, having an identity created by diversity. For many people from different parts of the world, Canada is a land of opportunity.

No geographical studies are more important to students than those based on their own country. The students' lives are bound up in the destiny of Canada, and they have a high stake in its future.

Studies in geography should never focus simply on the physical features of a country. Equally important are the people, their attitude towards their land, the society they create in it, and the bonds they establish among its parts. A course in Canadian geography for Canadians must entail an examination of Canada as a whole, observing and interpreting the patterns of development which have taken place and which are underway. Our students must acquire a knowledge of Canada and pride in their country.

Core content

Through selection and organization of appropriate content on Canada, teachers should provide students with opportunities to develop an understanding of:

— the natural, human, and economic characteristics of their local community and area;

— the extent and location of Canada in relation to other parts of the world in terms of distance, direction, time, and costs;

— the diversity of Canada's physical geography as seen in patterns of physiography, climate, natural vegetation, and animal life;

- the basic relationships which exist among relief, climate, vegetation, and soils;
- the effects of occupancy by native peoples, the founding nations, and subsequent immigrant groups on the Canadian landscape;*
- the nature and importance of Canada's renewable and non-renewable resources with specific references to a minimum of one agricultural commodity, one renewable resource, and one non-renewable resource;
- the need for wise use and management of resources;
- the conflict over land use or ownership of resources (one or more examples);
- the factors accounting for the density and distribution of population in Canada;
- the significance of transportation systems in the evolution of Canadian society;
- the factors affecting the rapid rate of urbanization (including the study of at least one city);
- the effects of industrialization and technological change on contemporary Canadian society;
- one (or more) major region and its relationsips to the rest of Canada;
- the sources, uses, and prospects of energy supply.

Skill development

Planning for skill development should take into account the present proficiency of students and the appropriateness of skills chosen for the content being studied. In the organization and guidance of studies of Canada, teachers should ensure that students are provided with opportunities to develop facility in the following skills or techniques:

- using topographic maps and/or air photographs for the purpose of:
  - determining direction
  - determining elevation from contours and spot heights
  - becoming familiar with conventional symbols and the use of colour
  - locating precisely using co-ordinates
  - recognizing degrees of relief, for example, flat, rolling, hilly, or rugged terrain
  - identifying common features by shapes
  - drawing profiles or transects
  - orienting air photographs to maps
  - correlating information from photo and map or from map to transect;
- interpreting relationships among relief and land use;
- interpreting thematic maps;
- correlating two or more maps using map overlays;
- using sketch maps, profiles, and transects to interpret photographs and maps;
- constructing and interpreting charts and graphs, including percentage bar graphs, double-bar graphs, and multiple-line graphs;

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*Teachers seeking assistance in the organization of studies on native peoples can refer to the resource guide, *People of Native Ancestry II*, Intermediate Division.

- making simple calculations of percentages, averages, and densities to make comparisons or establish relationships;
- using flow charts and diagrams to illustrate the movement of commodities or the stages in various processes.

Organizing a course on Canada

The organization of a course on Canada will depend on various factors such as : the year level at which the course will be taught; the geography of the local area; and the background, abilities, needs, and interests of the students.

Those planning the Canadian geography program will see the need to include one or more units which will provide an overview of our country. While other unit choices will likely be more specific, it is important to understand how those ideas under discussion fit into broad, overall patterns.

It will be important, too, to be aware that some aspects of Canadian geography may have been examined by students in their elementary school experiences. There is a need for close co-operation between the two panels in the Intermediate Division to ensure that the work undertaken in the course on Canada is cumulative and not unduly repetitive. Locality studies are an integral part of the course on North American geography as well. Planners should ensure that studies of the local community complement rather than duplicate studies done in previous years.

Some units should be selected on the basis of their importance to contemporary living. Some basic knowledge about our country is expected of each student; it is not unreasonable to expect students to be aware of political divisions, major cities, resources, and other such information about our country. In planning a program, attention should be given to the acquisition of a fundamental body of knowledge which will give students more understanding of current events and issues.

Teachers should provide a variety of approaches in unit organization using such examples as regional studies, comparative studies, problem solving, and case studies. It is important, too, to encourage students to examine current issues as they unfold in the media or through first-hand experiences.

Canadian diversity

Canada's immensity is magnified by its physical and cultural diversity. High mountains and broad plains, arctic barrens and productive lowlands, large cities and abandoned villages – all reflect the geographical variety of Canada. The marked differences in bedrock, surface features, climate, vegetation, and soils make it possible to identify a number of physical regions, each with a unique set of characteristics. Attracted by the opportunities these landscapes provide, settlers have come to populate them. Some regions have been more attractive than others, creating an uneven distribution of population. People from varied backgrounds have placed their imprint on the Canadian landscape and brought new cultures to enrich the Canadian experience.

This theme could serve well as an introduction to a course on Canada. As one purpose of the year's work, students should seek to comprehend the many ways in which human and natural elements have interacted to develop distinctive Canadian regions. The use of accounts, sample studies, photographs, films, and thematic atlases will assist students to achieve this purpose.

The physical patterns that show the diversity of Canada so clearly can be illustrated in a number of ways. As an alternative to traditional approaches, Canada might be viewed through the eyes of the artist, the poet, and the folk singer. A careful selection of art, music, and poetry will take the students from coast to coast. The artist's perceptions can be complemented with photographs and written descriptions. The development of accurate mental images of Canada's physical diversity will provide a sound basis for the studies to follow.

Where we live

Sparse numbers and uneven distribution are two significant characteristics of the Canadian population. On a broad scale, there are differences in patterns and density. On detailed examination, areas show differences resulting from early survey patterns and cultural differences. There are many examples that can show the various factors which affect settlement patterns and density.

These differences in population distribution require explanation. Whether they are attributed to physical, economic, or cultural factors, the explanations will provide opportunities to show how Canadians have adapted to their many environments. The use of maps, statistics, and other geographic materials can illustrate settlement patterns through the decades. They will also provide an opportunity to discover relationships between settlement patterns and types of economic activities.

Because an increasing percentage of Canadians are becoming urban dwellers, many students will want to become familiar with the growth and function of urban areas. Special emphasis can be given to the largest metropolitan areas and the major ports.

The translation of suitable statistics into graphic form will be a useful exercise to begin a study of our cultural diversity. A comparison of Canada's metropolitan regions with respect to their ethnic compositions will demonstrate the diversity of our cities. A comparison of graphs to show where people in those cities were born (outside of Canada, outside of the province, in the same province) will provide starting points for study.

Any study of population should include a section on native people. Their response to the environment, the disruption of their way of life after contact with Europeans, and their present aspirations should be understood by all Canadians.

Possibly no other theme in the course on Canadian geography offers better opportunities to look back at some aspects of our history and look forward and conjecture about the future image of Canada.

Locality studies

If students are to comprehend the many ways in which people interact with their environment, no locality can provide more immediate opportunities for discovery of patterns or explanation of processes than the one in which the students live.

Locality studies form an important section of a program developed within the course on Canadian geography. Because they also form an integral part of the course on North American geography, there should be co-ordination in the development of locality studies to ensure that the work is cumulative and not unduly repetitive.

It is expected that students will have gained some familiarity with the geography of the community, including site and situation, history of settlement, and the present pattern of settlement.

Emphasis in this year's work should take new directions. There is a need for students to become more familiar with the political processes – the paths of decision making between the local community and other levels of government. Students will be interested in examining the resources of the community and its industrial development. Some time should be spent on the future of the community – evidence of planning, trends in settlement, and future needs of the region.

It is important to emphasize what is *good* in the community as well as that which requires improvement. Students should become aware of their rights and their responsibilities as citizens. This goal is easier to realize when students have developed attitudes of pride in, and respect for, their community.

Developing our natural resources

In the twentieth century, resource development has become a complex undertaking involving capital, technology, labour, transportation, and energy. While much of Canada's economic development has been based on the exploitation of natural resources, the people harvesting the resources have usually been far removed from the mainstream of Canadian life and remote from the populated heartland. On the other hand, people in densely-populated areas have tended to take for granted the flow of resources from rocks, trees, water, and soil. Recently, more Canadians have become concerned about problems of supply, ownership, and foreign involvement.

In view of the world demand for resources in the future, Canadians will have to make difficult decisions concerning their arable land and supplies of fish, minerals, wood, and energy. Students need a clear understanding of resource development in the Canadian context. In addition, recreational and wilderness resources are becoming of increasing concern to Canadians. Students should have an opportunity to assess the potential of these resources and develop an appreciation of the immensity, variety, and beauty of our natural environment. The need for sound conservation practices should form a part of this topic. This facet of the study would include consideration of the best use of resources, preservation of the natural environment, satisfactory disposal of wastes or by-products, and the recycling of various products.

Many approaches to these studies are possible. Some students may be interested in looking at the mining industry through a case study which would examine the location, extraction, refining, transportation, marketing, and competition with respect to one mineral. A similar method can be used to follow a fur from the trap to the market place, or, a fish from the net to the table. Such examples will illustrate the problems, concerns, and plans of those Canadians who work in primary industries.

Current events recorded in the newspapers can provide other starting points. Canada's ability to exercise sovereignty over her arctic regions and the construction of pipelines and roads through fragile environments are issues that find a forum in the media on a regular basis.

Agriculture: an example of change

Few topics in geography can be examined without taking into account the effects of change. Agricultural topics are no exception. In the last few decades the percentage of the total Canadian population engaged in agriculture has dropped dramatically. Contributing factors include changes in farm size and ownership, electrification and mechanization, application of science and technology, upgrading of plant varieties and animal breeds, changes in processing and marketing techniques, and the realignment of markets.

One approach to change in agriculture might include an overview of farming types. The use of several examples from across Canada can show some of the characteristic features of agriculture as it is practised today. Among these are the size of farms, cropping practices, natural hazards, degree of mechanization, seasonal rhythm of work, harvesting, transporting and marketing techniques, and competition. Distribution maps can assist in showing how land use is influenced by natural conditions and by the impact of urban sprawl, the building of airports, or the development of additional highways.

Studies of farming using comparison or contrast can be useful in determining the factors that tend to influence or control the farmer. Change may be propelled by economic, social, political, and technological forces. Students should become aware of some of the barriers to change, how change takes place, cause-and-effect relationships with the examples selected, and the effects, both beneficial and harmful, of that change. The theme gives many opportunities to predict changes that might occur in the future.

Students can look at changes in the rural/urban ratios over several decades, ways of counteracting the vagaries of nature, changes in farm machinery, changes in yield per hectare, estimates of decline in the total quantity of arable land, the increasing use of farmland for recreational purposes, and the capital required to begin farming.

It would be interesting to pose the question, "Would you like to become a farmer?"

Energy

The increasing world demand for energy has made energy supply a vital issue. Canada is regarded as one of the energy-rich nations; yet we are told that shortages are imminent. The harnessing of alternative sources of energy poses numerous problems. The costs of exploration, production, and transmission are extremely high. Proposals for developing nuclear power stations, hydro-power dams, or rights-of-way for transmission lines face stiff opposition almost everywhere, resulting in major delays, if not abandonment.

In the Canadian North, where much of our remaining energy resource potential lies, native peoples want to have comprehensive assessments of the environmental and social consequences before development can proceed. Companies who propose developments in the North encounter opposition from conservationists. Many Canadians are faced with uncertain supplies and increasing prices for imported petroleum.

Canadians are confronted by a number of energy conservation issues. One of them concerns the rate at which we are using our energy resources and whether that rate should be reduced. Another issue relates to our traditional role as an exporter of oil and natural gas to the United States. Some believe that an energy-short country should phase out such exports. A third issue revolves around national policies governing prices, taxes, and subsidies for producing provinces or their customers.

In addition to the concerns and issues outlined above, the following matters should be considered:

- the ways of generating electricity
- the major sources of Canada's energy
- the North American power grid
- ways of meeting peak demands for energy
- new and recent power developments such as the Nelson River, James Bay, and Churchill Falls projects
- energy sources for the future: solar, wind, tidal, or biomass energy.

Attention should be given to the contributions that can be made by individuals and groups in the conservation of energy.

Water

Fresh water is one of Canada's most abundant natural resources. Its use affects virtually every aspect of Canadian life. Domestic and industrial water supply, sewage disposal, irrigation, transportation, recreation, electric power generation, and wildlife habitats are some examples of the many uses of water.

Investigation on an individual, small-group, or class level can be based on the following topics:

1. *Basic nature of water*: Studies in this area could focus on the hydrologic cycle, seasonal distribution of precipitation in selected regions, water runoff or stream-flow variations, the nature of ground water, and eutrophication.
2. *Water deficient areas*: Students can begin with the construction of drainage basin maps which will give some idea of the amount of water that flows away from potential users. Correlation of drainage and climate maps should provide basic information about areas of surplus and deficiency. Realization of the water requirements of industry will point out the need to consider the possibility of water deficiency in humid regions.
3. *Water transfer*: Much of Canada's water flows unchecked into northern seas. Students can learn about some of the proposed water transfer schemes to supply deficient regions of North America, for example, to move Yukon River water to the United States and Mexico, and the reversing of rivers now flowing into James Bay to the Great Lakes system. It would be important to consider the possible effects of such water transfers on climate, wildlife, and existing communities.
4. *Water management*: A review of this section can be based on an example of a water conservation scheme. Students can begin with a map of the local watershed, listing its potentialities and areas of difficulties.

Transportation bonds

The importance of transportation in a country with the vast proportions of Canada cannot be ignored. Given the size and diversity of regional needs, an exchange of goods within the country and across its borders is essential. Transportation routes and methods unite our country by linking places as far apart from each other as Frobisher Bay and Windsor or Bonavista and Port Alberni.

Distances and physical barriers have made the cost of establishing transportation links an important factor in our economic development. In fact, the costs of transportation and communication facilities have been, and continue to be important political issues.

Students will develop an awareness of the natural and agricultural resources of Canada in the geography course. It is important for them to realize that these resources have little value unless they can be transported to areas where they are required. One of the purposes of this unit is to impress on students the importance of transportation in making full use of our resources.

Many students are unaware of the variety of goods transported or the complexity of transportation systems. Consideration of factors such as distance, the cost of transshipment, and the mode of transport should stimulate thought and discussion about the significance of transportation to Canada's economic well-being.

The patterns of Canadian transportation links revealed on a map will raise many questions concerning source, destination, and route, and transportation technology and problems. Most of the links have interesting historical aspects.

The study lends itself well to individual investigations. The following are sample questions.

1. How important will depth of water in harbours be in the future? Where are Canada's deepest ports situated?
2. How important are transportation patterns within cities?
3. What are the tolls paid by a freighter travelling from Montreal to Thunder Bay? Who is in favour of high seaway tolls?
4. What is the explanation for our pattern of pipelines?
5. Are railways still being built in Canada? How does their construction change the existing network?

Boundaries

Studies in geography examine the spatial distributions that create patterns on the earth's surface. An examination of atlases will show a great diversity of boundaries that have been plotted to delimit areas on the basis of physical, economic, social, or political criteria. In Canada, boundaries can be drawn to show the locations of areas such as the wheat growing regions of the Prairies and the Indian reserves on Manitoulin Island. The plotting or locating of boundaries raises the question, Why here? This theme will provide opportunities to review some of the material examined earlier in the year, as well as providing a basis for new investigations

Both physical and political boundaries affect human activities. The Cordillera, the Canadian Shield, and the Appalachians have had tremendous influence upon the development of settlement patterns in Canada. Human boundaries are often equally important in the evolution of the landscape. One example is found in long lot and township survey patterns found side by side in the provinces of Quebec and Manitoba.

Climatic boundaries have had a great effect on population in Canada. The climatic limits on agricultural production have effectively drawn population boundaries; climatic boundaries locate trees by species, show the presence of permafrost, and suggest places where cattle can graze or wheat can grow.

The evolution of the Canada-United States border, native reserve boundaries, the Quebec-Labrador boundary, and local township, county, or municipal boundaries are topics that students could explore in an historical context. Contemporary events provide many examples of boundary disputes over resources. Provincial-federal oil and mineral rights, maritime limits, and national park boundaries are typical issues that illustrate the significance of boundaries.

Canada's partners

An investigation into Canada's partners can give insights into the extent of interaction between Canada and the world. International air traffic, conventions and meetings, cultural exchanges, athletic competitions, the flow of capital, the spread of innovations and inventions, tourism, the deployment of military personnel and multinational business influences — all illustrate the global network of which Canada is an important part.

Students studying Canada should develop an understanding of some of the myriad relationships Canadians have with other people. Canada has a reputation for initiative in global affairs. The United Nations, NATO, peace-keeping missions, environmental conferences, and aid to developing nations are a few examples of Canada's international involvement. Topics for investigation might include :

1. *Conflicting interests*: People in many countries rely on Canadian raw materials such as lumber, coal, newsprint, grain, and minerals. These primary materials are shipped to countries that process them into finished goods. Should we sell our non-renewable resources? If we reduce our exports, how will we pay for such imports as coffee, cotton, oranges, and clothing?
2. *Foreign investment*: Estimates of foreign ownership in resource-based industries range as high as ninety-seven per cent. How can Canadians control foreign firms without slowing the economy?
3. *Foreign aid*: It is important for students to know what international organizations are doing about poverty, illiteracy, disease, and hunger. Investigations into the objectives of organizations such as CIDA, the World Bank, UNICEF or OXFAM will lead students to an examination of the world food supply, attempts to bring relief to the hungry, prospects for the future, and Canada's role in foreign aid.

IV. Europe and Asia

A gigantic land mass is studied for its diversity, unity, and world significance.

Home to three-quarters of the world's people, Europe and Asia offer virtually unlimited possibilities to students studying the world in which they live. Throughout recorded history, Europe and Asia have undergone dynamic change: migrations pushed existing societies into new territories; nations consolidated and expanded militarily to become civilizations; religious and cultural movements swept across human and natural boundaries; economic and military alliances were forged and broken.

The twentieth century has seen an increasing exchange of energy, capital, technical skills, services, and culture added to the traditional flow of food, raw materials, and manufactured goods. Groups of nations have formed associations or signed agreements to make exchange easier.

The twentieth century has also seen an increasing interdependence between Eurasia and Canada. Many of the important questions today (and in the future) are questions which affect the entire world. A global view makes it possible to see that oceans may be barriers or links, that problems that seem remote are, indeed, at our doorstep, or that international co-operation is based on goodwill and self-interest.

Core content

Through selection and organization of appropriate studies of the continents of Europe and Asia, teachers should provide students with opportunities to develop an understanding of:

— the location and extent of the Eurasian land mass and its relationships to Canada in terms of distance, directions, times, and costs;

— the variety and complexity of physical patterns which have contributed to the development of distinctive ways of life in Eurasia;

— the patterns of production and consumption of food and manufactured goods among nations at different stages of economic and technological development;

— the importance of individual commodities in the economic organization of one or more nations;

— the immense disparities in quality of life and access to opportunity available for inhabitants of selected nations;

— the significance of population density in establishing and maintaining acceptable levels of living for people;

— the widely varying responses of selected cultures and political systems to the opportunities for economic and social development available within their environment;

— the significance of migration in social, economic, and political affairs;

— the interdependence which exists today among various regions of the land mass and between Canada and Eurasia;

— the significance of those events taking place in Europe and Asia which are of particular interest and importance to Canadians.

Skill development

Planning for skill development should take into account the present proficiency of students and the appropriateness of skills chosen for the content being studied. Where students have been introduced to topographic map use and the school has editions from foreign countries, air photo and topographic map skills can be reinforced and extended. In the organization and guidance of studies of Europe and Asia, teachers should ensure that students are provided with opportunities to develop facility in the following skills or techniques:

— using maps based on a variety of scales and projections to determine direction, distance, and location;

— use of degrees and minutes for precision in determining location on the earth's surface;

— drawing and interpreting cross-sections and transects;

— recognizing patterns on maps through understanding of the use of lines, colours, and symbols in cartographic representation;

— interpreting a variety of thematic maps such as those showing physical, cultural, economic, or political data;

— correlating information from two or more thematic maps;

— sketching simple maps or diagrams to show distributions or relationships;

— using flow charts and diagrams to show movement of commodities or stages in a process;

— comparing statistics in different forms;

— making simple calculations to determine percentages, averages, densities, or yields;

— constructing and interpreting charts and graphs including percentage bar graphs, double-bar graphs, and multiple-line graphs.

Organizing a course on Europe and Asia

The sheer size of Europe and Asia makes it necessary to plan the year's work carefully and use available time wisely. Planners must seek a balance between developing units in such depth that variety is lost and studying a large number of topics superficially with the result that little understanding is gained.

No single type of course can meet the needs of all students. Planners should tailor the course to fit the needs of the individual as well as the group. There will be a need for units using a variety of approaches. One or more units should provide an overview and orientation. Other units can be organized to examine one region in depth, or to make comparisions and contrasts between areas possessing significant similarities and differences. Others can investigate themes such as change, conflict, co-operation, interdependence, disparity, modification of environment, and migration. To aid in the process of organization, suggestions for a wide variety of topics and approaches are presented in the following sections.

The mosaic

Within Europe and Asia, many patterns combine to form a unique mosaic. Mountain ranges, rainfall and temperature patterns, and racial, language, and religious patterns are all part of that mosaic, and are worth investigating. The immensity of Eurasia is matched only by the complexity of its physical, cultural, and economic patterns. The sheer size and diversity of population can stimulate the imagination of the students and will encourage them to examine those important areas found on the other side of the oceans.

This unit could form an introduction to the course on European and Asian geography. Activities should be developed to assist students in developing an overview of the land mass and recognizing certain physical, cultural, and economic patterns which will be studied in more depth later in the year. Students should become aware of the location and size of Eurasia. Of particular importance would be the identification of links between Europe and Asia and our province and country.

Regional studies

The distinctive characteristics and strong patterns that identify regions can take many forms, for example, the physical features, crop specialities, historical heritage, and occupations. Regional studies can be carried out at various levels. Large-scale regions such as the Mediterranean, Scandinavia, Western Europe, Southeast Asia, or the Indian Subcontinent can be used as examples. River valleys such as the Rhine, Indus, or Yangtze, or cities such as Paris, Vienna, Moscow, or Calcutta, are equally suitable for examining regional characteristics. The depth and complexity of any study will depend largely upon the objectives established at the outset. Physical features, culture, language, religion, economic systems, or patterns of occupancy are all valid criteria for defining regions.

In the twentieth century, no region is independent of the rest of the world. Students will wish to see some of the historical, political, and economic connections between the region under study and Canada and the rest of the world.

The regional approach in geography encourages the organization of a considerable body of information into formats that are more understandable. Teachers should select the region(s) to be studied with care. Factors such as student interest, the cultural makeup of the school community, resources available, and links with previous years of study in geography, determine what might be chosen as the content base and focus. Whether students are engaged in a detailed study of the Islamic World, the Danube Valley, industrialized Western Europe, the city of London, or the Mekong Delta, certain outcomes will be common to all studies. There will emerge an understanding that the globe can be divided into regions in an almost infinite number of ways depending on the geographer's purpose, but in order to be meaningful, regions must be based on significant criteria. Students will also recognize that within the limits of any region there are unifying elements.

Comparative studies

Regional studies lead naturally to comparisons and contrasts. The process of seeking similarities and differences can assist students to see how people have used opportunities in a variety of ways. Britain and Japan, with their insular positions, high population densities, manufacturing emphasis, and maritime outlook, show many common characteristics. At the same time, sharp contrasts can be drawn between their industrial organizations, labour relations, educational systems, and cultural traditions. An examination of two nations such as Japan and Britain, or Japan and the Netherlands, reveals that East and West share many similarities and possess many differences.

Comparative studies provide opportunities to increase the students' awareness of geographic concepts and to acquaint them with the ways in which people adapt to or alter their environments. Similar or contrasting approaches to common problems can be examined. For example, some countries deal with the problem of too little land by terracing, while other countries drain swamps, irrigate deserts, or reclaim land from the sea.

Eurasia offers many possibilities for comparative studies: international cities such as Paris and Moscow; strategic locations such as Singapore, Aden and Rotterdam; the economic systems of Eastern and Western Europe; river valleys such as the Ganges and Volga; and communal life on a kolkhoz and a kibbutz.

Change

In geographic studies (as opposed to the historical perspective) the effects of change can often be examined over very short time spans. Examples of change in Europe and Asia include: a new entry into the European Economic Community; the introduction of more productive strains of rice or wheat; changes in cropping practices among subsistence farmers; and the conversion of desert into cropland. A review of the twentieth century provides examples of drastic changes in the course of world affairs which had their genesis in Eurasia.

Nature provides many opportunities to investigate change and its effects on human populations. Examples include those expected changes brought about by climate on a seasonal basis as well as calamitous changes precipitated by such natural disasters as volcanic activity, earthquakes, floods, droughts, disease, and pestilence.

A unit developed from this theme should give students an understanding and appreciation of the effects of change on a society. It should provide opportunities for detailed examination of change as it is taking place in two or more specific locations in Europe and Asia. Students should become aware of how change takes place, the barriers to change, cause-and-effect relationships within the samples selected, and the effects, both beneficial and harmful, of that change. Students should also have the opportunity to hypothesize about changes that could occur in the future.

Links

Units organized under this title can encourage students to study Europe and Asia as a whole, analysing the connections among the various landscapes and cultures that comprise the two continents. Even in biblical times, men were aware of the differences that existed from place to place on the earth's surface, and out of this awareness came the desire for interchange of goods and ideas. Often the forging of links resulted in significant forward strides in the development of civilizations.

This theme suggests a wide range of specific content examples to form a basis of study. A unit might be developed around an investigation of raw materials such as petroleum or iron ore. Such a unit could examine the areas of production, refining processes, transportation systems, and the competition that exists on the world market.

Some classes will prefer to undertake studies of manufactured products such as automobiles, electronic equipment, chemicals, or clothing. Such items are manufactured in a number of locations in Eurasia and find markets and competition in Canada and elsewhere.

Case studies provide another method of investigating aspects of an industry: a unit on automobile production will show how component parts are brought together in an assembly system; a study of one or more of the oil-rich nations will illustrate not only the links between these nations and Canada but also the interdependence that exists in our world today.

The agricultural base

One essential task in an area with billions of people is the production of food. Land utilization in Europe and Asia ranges across a host of examples that are markedly different from one another. Consider the differences between:

- — the methods used to grow rice and wheat;
- — the competition facing the rubber plantation owner in Malaysia and the assured market of the peasant farmer in Communist China;
- — the percentage of the population employed in agriculture in India and Western Europe;
- — the availability of land for agriculture in Norway and France;
- — typical crops raised in the oases regions of Saudi Arabia and the Rhine Valley;
- — the intensive use of land in monsoon Asia and the extensive use of land on the steppes of the U.S.S.R.;
- — the productivity of farm workers in Denmark and Pakistan;
- — land tenure in Southeast Asia or the Soviet Union and the United Kingdom or France.

One way of approaching this theme is to select two or more agricultural products which are typical of specific regions of Europe and Asia. Rice and wheat are examples of crops that are the dietary mainstays of a large number of people. In a broad sense, the roles of the two grains appear to be somewhat similar. However, there is a fundamental distinction between the two: wheat is predominantly a cereal common to technically advanced nations and enters world trade on a large scale, while rice is a staple of technically underdeveloped populations and only a small proportion finds its way to the international market.

Another approach is to organize units around methods of farming, choosing appropriate examples of subsistence farming, commercial and cash crops, irrigation techniques, means of increasing crop yields, climatic limitations, and problems of meeting minimum nutritional standards.

Migration

Migration is one example of movement. Throughout recorded history, the mosaic of Eurasian peoples has undergone dynamic change. Migrations pushed existing societies into new territories; nations consolidated and expanded militarily to become civilizations; religious and cultural movements swept across human and natural boundaries; economic and military alliances were forged and broken. We should remember, too, that most Ontario students can trace their families back to origins in Europe or Asia and that, for many, close personal associations still exist.

Human migration began in antiquity and continues into the twentieth century. Students who wish to investigate migrations can have many interesting choices to consider. Following are some examples of migration on an international scale:

- 20 000 000 people have been involved in the migration from the communist countries of Eastern Europe to various countries in the West.
- There has been an ongoing migration of Jews from around the world to Israel.
- Many people are moving from Southern Europe to work in the Common Market countries.
- At the time of partition, about 9 000 000 Muslims moved from India to Pakistan, and 10 000 000 Hindus moved in the opposite direction.
- Many colonists have returned home after colonies obtained their independence.
- A large number of classes in Ontario will have students who have had personal experience with migration from places in Europe or Asia to Canada.

A second type of migration is internal to individual countries. Perhaps most common is the flow of people to cities but other examples include the movement of Italians from south to north, the movement to populate and develop remote areas of Siberia, and the exurban movement from the city of London.

A third type of migration can be termed "seasonal". Examples in this category include migrant farm workers following crops at planting and harvesting, and the tourist industry and its attractions which encourages many people to move from one part of Eurasia to another to find work or to enjoy themselves. In many places, people move animals from one location to another in search of water and forage.

Understanding of the many causes and effects of migration will emerge from application of the questions: who? how many? when? where? and why?

Interdependence

The population and extent of Europe and Asia make events occurring there of importance to all other areas of the world. A review of twentieth-century history provides numerous examples of drastic changes in the course of world affairs that affected Canadians. Two world wars, the rise of communism, the death throes of empires, and the development of worldwide trade and competition are just a few examples.

A characteristic feature of recent history has been the strengthening of links among the nations of Europe, Asia, and the rest of the world. Improved transportation and communication is contracting the world to make all people neighbours. We are living in a global village and we share, willingly or unwillingly, the problems of other peoples. An earthquake in Italy, a military event in Southeast Asia, the entry of a country into the European Common Market, or an increase in the price of petroleum from the Middle East, are examples of events which have repercussions in Vancouver, Toronto, and Halifax.

Canadians are reminded of connections with Europe and Asia daily: foreign fishing fleets make regular visits to Canadian coastal waters; oceangoing ships penetrate the St. Lawrence Seaway; increasing competition in garments from Taiwan, Korea, and Hongkong is felt by Canadian manufacturers; investment in our raw material sources originates from across both the Atlantic and the Pacific; immigration has brought many Europeans and Asians to our country.

A unit of work organized around this theme will permit students to see Europe and Asia in the world setting and to examine a few of the many links that Canadians have with those parts of the world.

People and problems

Units developed within this theme could focus on the developing nations of Eurasia and their efforts to improve the levels of living for their populations. The World Health Organization estimates that fifteen per cent of the world's population goes hungry most of the time and that a further thirty-five per cent is undernourished. These facts suggest that students should know the causes and potential solutions for hunger and malnutrition.

Studies can begin with statistics to develop a series of maps to show factors such as per capita income, calorie consumption, literacy, infant mortality, life expectancy and population growth rates, and the productivity of workers. This series of maps will identify the Third World areas, and encourage inquiry into the reasons for their level of development.

The average Canadian spends less than one-third of his income on food, and for this portion receives not only an ample amount but also a variety that is rich in protein. In contrast, people in India on the average will devote four-fifths of their extremely low incomes to purchase food and yet their budgets purchase neither sufficient quantities of food nor food that is rich in proteins and vitamins. Other countries lie somewhere between abundance and subsistence.

It is important for students to be familiar with international organizations and what they are doing about poverty, health, and hunger. Many students are not aware of the work of organizations such as the FAO, UNESCO, UNICEF, and OXFAM. A unit based on one such organization will lead students to an exploration of the world food supply, the attempts being made to bring relief to the hungry, the prospects for the future, and Canada's role in foreign aid.

Units organized within this theme will bring out the many obvious disparities between the comforts and opportunities available to Canadians and those available to people in other lands. Teachers may wish to use these as opportunities to raise issues related to values and attitudes.

The Nature of Studies in Geography

Planners and administrators should be aware of the basic purposes of geographic studies as they plan the role such studies will play in the total program of schools. To assist in the planning process, the following pages include brief descriptions of the basic elements of geographic studies in the Intermediate Division.

Knowledge

Among the objectives of geographic studies is increasing knowledge of places on the earth's surface. Because all places are unique, it would be unreasonable to expect anyone to have a comprehensive knowledge of a great many places. Nonetheless, in any study, certain information such as location, population, major cities, resources, main crops, transportation routes, and trading partners can become significant. Achieving the goals of geographic education will, therefore, involve the acquisition of a fundamental body of knowledge. The selection of an appropriate content base is important; it is realized that choosing the most significant information is not an easy task.

Accumulation of facts, however, no matter how detailed and comprehensive, may not be an efficient use of time or lead students to understanding. There is need for central ideas and organizing principles that help to assemble information into meaningful patterns.

A number of educators have developed descriptions of the central ideas and organizing principles of geographic studies. Teachers and others who wish to become familiar with some viewpoints on geographic education and conceptual schemes for the organization of programs can find assistance in the section on Teacher References in this guideline. A simplified list of basic ideas is presented below. While these ideas can be helpful in organizing studies, they should not be regarded as generalizations to be taught. Rather, students should become more capable of understanding and expressing generalizations as a result of the processes of instruction or investigation.

Regionalism

Regions are areas of the world that are characterized by enough similarities to be considered as units. Because regions are always defined in terms of specific criteria, many kinds of regions exist. The characteristics and patterns that identify regions can take on many forms. A natural region, for example, has a uniformity of landforms, vegetation, and climate within its boundaries so that it is distinctive from neighbouring landscapes. Other valid criteria for delimiting regions include culture, language, religion, economic function, and patterns of occupance.

A regional approach to geographic studies concentrates on defining, describing, analysing, synthesizing, and generalizing to arrive at an understanding of the essential characteristics of the area under study. In most regional studies, both physical and human factors will be involved.

Areal differentiation

Although there is repetition of physical characteristics, cultural backgrounds, or economic conditions over the surface of the globe, all places on the earth's surface are unique. It is important for students to understand why selected areas of the world differ not only from one another but also from location to location within themselves. Because there is such variety, it is useful to develop the ability to organize information into significant patterns that reveal similarities and differences from place to place. Techniques for developing this skill include extensive use of photographs and a wide variety of maps. The ability to select pertinent information and organize it into distinguishable patterns makes it possible to divide the earth's surface into areas based on such criteria as land use, soil types, and climatic conditions. It should be recognized that culture, value systems, political ideologies, and religious beliefs, like physical features, are contributing factors in the similarities and differences from one area to another. Students should be given every opportunity to see how such similarities and differences affect relationships between humans and the land. The teacher's task is to help students to identify patterns and account for their existence.

Spatial interaction

A major concern of studies in geography is the linkages that exist among the many places on the earth's surface. The flow of rivers, ocean currents and winds, and the migration of birds and animals are examples of natural links. Rivers sometimes bring water to moisture-deficient areas or serve as transportation routes. Some ocean currents bring heat from equatorial regions to more northerly areas while winds can be responsible for moving moisture landward from the seas. Migrating birds and animals use different parts of the earth's surface during the yearly cycle. Railways, bridges, and telecommunication installations are examples of links that have been developed by people to promote trade, transportation, and communications. A flood, a new highway, a change in government, or a tariff agreement may have far-reaching and often unpredictable effects because each affects the interaction of one place with other places.

When students undertake to find out where the power they use is generated, how an ocean current affects the lives of people, or how Jamaican sugar reaches our breakfast tables, they will discover the countless connections and interacting forces present over the earth's surface. Understanding the nature of interaction between places will show how people use the earth's resources.

The support of life

Life as we know it exists only in a thin layer close to the earth's surface. Within this layer, populations are unevenly distributed. In areas where it is difficult to obtain food, clothing, and shelter, the population is often sparse; environments which provide greater resources and opportunities usually have denser populations. The differences in ability to support populations may result from many factors, for example, agricultural fertility, climate, and strategic location.

Studies should consider how people have used their environments to sustain their populations. Through recorded history, the earth's total capacity has been extended by means such as migration, trade, mechanization, irrigation, and the control of disease. Each method has its disadvantages and limitations, however, and studies should be concerned with the capability of the earth to continue to sustain increasing human populations at acceptable living standards. Investigations into potential sources of support such as oceans and improved plant varieties should be considered.

Resources

To support life on earth, people must have resources. Resources, however, must be seen in a cultural context – they are useful only to those who recognize them as resources and can utilize them at an acceptable cost. The wise use and management of both human and natural resources is essential. Canadians, in particular, should have a strong interest in resource questions. Why are some resources exploited and others not? Who owns the resources? How can renewable and non-renewable resources be managed best? What are the problems posed by resource depletion? Answers to such questions are often based on a system of values and reflect the importance attached to issues of conservation and environmental quality.

People as choosers

There are countless examples of how people alter landscapes to suit their purposes. In any dealings with the environment, people tend to become a dominant force. Although there are always constraints, the human ability to create increasingly powerful tools has made it possible to alter the environment to meet human needs.

The process of changing the landscape has had both fortunate and unfortunate results, ranging from city parks and reclaimed marshes to gaping pits and gullied slopes. It is clear that decisions on how the earth is to be used and how its people are to be treated will raise many values questions.

Studies should investigate the role of decision makers and the factors on which past decisions have been based and those on which future decisions will be made.

Constant change

Studies in geography should help students to recognize that the present is a result of the past and to realize that the future will bring more changes. When change is accepted as a constant factor, the nature, rate, and impact of change become important variables in understanding the world.

Society is becoming more and more concerned with the rate and impact of change. Students should take note of the degree and the effect of change in virtually every geographic study. Some students may wish to know how predictive techniques can be used to anticipate the effects of change over time.

It is important to realize, too, that in the midst of constant change there is also stability. The desire to satisfy human needs is constant, although the means to accomplish the task change over time.

A global viewpoint

Events in the twentieth century make it easier for this generation of students to grasp the concept of the earth as a spaceship or of humans as inhabitants of a global village. Satellite photographs of the earth are commonplace, and goods from around the world are available in most of our stores. Radio, television, newspapers, and magazines bring events from around the world into our homes.

A global view makes it possible to see oceans as barriers or links, pollution problems as immediate or remote, and international co-operation as a gesture of goodwill or as an example of self-interest. A global viewpoint serves other practical purposes as well. Studies at all scales – local, regional, national, or continental – will assist students to see how events can be fitted into their appropriate places in the total scheme. In addition, it can provide a better appreciation of the contributions made by all of the world's people.

Studies in geography should emphasize that seemingly isolated incidents can produce effects around the world. Teachers should ensure that each unit of study includes some reference to the area in its global context.

The round earth on flat paper

Teachers are faced with a staggering volume of geographic material and with the obligation to provide students with a realistic view of parts of the earth they may never visit. It is necessary to make use of graphic representation to depict facts and patterns in an understandable though abstract form. Students will need to become familiar with a variety of graphic techniques.

Maps will probably be the most commonly-used graphic tools. All maps have limitations. The impossible task of depicting the round earth on a piece of flat paper necessitates compromises. Symbols must be used to represent reality. Because map design requires skills of selection and classification, the production of maps by students to support their studies should enable them to develop and practise basic cartographic skills.

Globes, photographs, films, sketches, models, graphs, and diagrams are other means of presenting information visually. The gradual building of facility with these tools will help students to grasp the variety and complexity of the earth's features.

Attitudes and Values

Human attitudes and values are often reflected in the landscape. If an ultimate goal of humanity is to live in harmony with the environment, studies in geography should provide opportunities to develop informed and rational attitudes about environmental issues. Students often express concern for what should be and what will be, as well as what exists. Consciously or unconsciously, they are already making decisions about the environment through actions such as energy use, paper consumption, preferences in foods, and handling of litter. Given the opportunity to examine relevant facts and evaluate diverse viewpoints in a supportive classroom climate, they will be better able to determine what considerations should govern their own behaviour, both now and in the future.

The teacher's task is to assist students to recognize and deal with values issues in a positive way. This will require identification of issues that are inherent in all studies about the human use of the earth, and the presentation of material so that alternative choices and their consequences become apparent. There is no shortage of values questions in geographic studies. In the immediate future, Canadians must make decisions about matters such as setting aside recreational places, preservation of farmland, sources and uses of energy, responsibilities to the native peoples, acceptance of immigrants, development of natural resources, foreign ownership, terms of trade with less fortunate nations, and a host of other issues. These and other concerns related to war, poverty, economic disparity, and human rights will arise in the study of other areas of the earth.

Teachers can help to put contemporary concerns into perspective. Students can consider the consequences of choosing one alternative from among others and the implications of that choice for their individual and collective futures. The present environment provides many examples of the consequences of decisions that were made in the past. Students can see the results of decisions in land-use patterns, conservation areas, redevelopment projects, dust bowls, and many other features on the landscape.

Many studies can be undertaken directly as a result of current issues and questions of public policy. In cases where studies focus on a problem, students will be led to information whether or not it lies neatly within a particular subject field. For these reasons, geography teachers should welcome opportunities to join other teachers in planning and teaching interdisciplinary units of vital interest to students. In many schools, the students themselves will recognize the importance of particular issues. Their participation in planning will assure the relevance of studies.

Skill Development

Each course description in this guideline includes skill development as a part of the core expectations.

Geographic studies should provide students with opportunities to achieve a satisfactory level of competence in skills. The deepening of knowledge of the human and physical world fulfils one objective of a program in geography. A second objective requires teachers to introduce and students to develop proficiency in skills that have broad applications in life situations.

Basic skills are the tools of knowledge. Without the skills to seek out pertinent knowledge, to deal with it in an organized manner, and to communicate findings to others with clarity, students can gather large amounts of information with little understanding.

Much skill development will take place as an integral part of the acquisition of knowledge and the formation of basic concepts in each unit of study. However, it must not be left to chance. Course organization should ensure that skill development is a planned part of every unit. It will be necessary at times to devote time to the practice of specific skills.

In organizing and guiding studies, teachers should ensure that students are provided with opportunities to develop facility in a variety of techniques usually associated with geographic study. Because geographic studies aim at helping students to visualize reality, skill development will include familiarity with tools such as photographs, films, models, samples, maps, atlases, and globes, and with techniques such as field work, interviews, and case studies.

A number of the skills designated for particular courses may already have been mastered by students in earlier grades. It is expected that skill development will be cumulative, i.e., there will be a progressive acquisition of skills. Teachers should build on the skills that have been acquired and provide opportunities for practice, reinforcement, and new applications.

No list of skills will meet the needs of all teachers. In the skills list designated for each course, an underlying principle is that by the end of the Intermediate Division, students will have had opportunities to develop geographic skills and techniques in the following categories:

— determining location, distance, and direction
— representing actual distances or areas on maps or charts using fixed ratios or scales
— using symbols to depict real phenomena
— depicting shapes that have more than one dimension on flat surfaces such as maps and diagrams
— locating, interpreting, organizing, recording, and retrieving information
— translating geographic information from one form to another
— presenting and deriving information through photographs, maps, diagrams, charts, graphs, and sketches
— using problem-solving techniques
— interpreting patterns and seeking relationships

Communication Skills

All studies must help students to acquire effective communication skills in the English language. This includes organizing ideas in a logical, consistent manner and communicating clearly and effectively with others in writing and in speech. The following are some verbal and writing skills which can be developed in the course of geographic studies:

1. *Locating information*: In geographic studies, information is likely to be available from a wide range of sources including atlases, gazetteers, maps, textbooks, and encyclopaedias. Because studies will focus largely on the contemporary world, it is important to make use of magazines, newspapers, film, television, and recorded materials as well. If maximum benefit is to be derived from their use, students will need to acquire the particular skills each source requires. Skills of reading, observing, listening, interpreting, and evaluating become important.
2. *Organizing information*: This includes steps such as making an outline of main points about a topic, supporting major points with selected facts, responding to questions that require classification of information, arrangement of facts or events in a logical order, writing summaries of main points, and preparing displays to present information.
3. *Using information*: This includes translation of information into forms that are pertinent to the task at hand, capability to retrieve information when it is needed; and judgment in recognizing what information is applicable to a situation.
4. *Evaluating information*: This includes exercising judgment to distinguish between fact and opinion, comparing opinions to discover agreement and disagreement, recognizing bias, prejudices, and inconsistencies, drawing inferences or implications, and reaching tentative conclusions or generalizations.

5. *Defining and using terms*: This includes development of an appropriate vocabulary so that words may be used in precise and concise ways. The specialized vocabulary for Intermediate students includes common expressions such as insolation, precipitation, cyclonic rainfall, and barometric pressure. Facility with such vocabulary should develop as a result of experience with textbooks or other materials used in studies.
6. *Communicating with others*: This includes speaking with assurance and accuracy, writing with clarity and precision, presenting information neatly in graphic forms, determining and defending a point of view using valid evidence, and portraying roles credibly in simulated situations.
7. *Group skills*: This includes developing the ability to work in groups for research and discussion, respecting the rights and opinions of others, accepting valid suggestions and criticism, accepting the self-discipline necessary to achieve common goals, and carrying a fair share of the workload required to reach those goals.
8. *Individual research skills*: This includes defining a task, locating appropriate information in an efficient way, working independently without supervision, organizing information in a logical pattern, presenting information succinctly, acknowledging sources in an appropriate way, and deriving satisfaction from the process and products of individual research.

Teachers must ensure that skill development is a fundamental component of every unit of study. It will be recognized that no list of skills can be complete and all-inclusive. In all cases, the importance attached to different skills should be related to the abilities and maturity of the students in the division.

Evaluation

The connection between objectives and evaluation is central to the ongoing process of curriculum developent. The evaluation process should be directed towards determining the degree to which objectives have been achieved. After due recognition of changes that have occurred during the teaching and learning process, objectives form one basis for evaluation.

Students in the Intermediate Division represent a wide range of talents, intellectual capabilities, and levels of maturity. Over a period of time each may demonstrate a capacity to handle increasingly difficult tasks followed by periods of apparent regression. Regular, carefully-planned evaluation will assist a teacher to chart student progress with a degree of precision and to plan subsequent learning experiences with some confidence about their appropriateness.

Students should not only be involved in identifying objectives for their learning, but also in evaluating their success in achieving objectives. In this way, they can become more responsible for their learning, more able to recognize their areas of competence and weakness, and more willing to undertake new tasks.

In evaluating the effectiveness of the organization and implementation of a unit, teacher and learners should consider the following questions:

— Were the objectives achievable through the content?

— Were the objectives sufficiently specific to be clear, and yet open enough to encourage growth?

- Was there a central focus to provide a sense of direction?
- Was there a spirit of inquiry?
- Was there an opportunity to broaden interest and pursue new ideas?
- Was it possible for persons of differing abilities and interests to develop in their particular ways?

Further planning can proceed based on the responses to the above questions.

Such evaluation on a continuing basis is directed not only to the effectiveness of unit organization and implementation, but also to the degree and quality of student progress. Evaluation thus becomes diagnostic and leads to remedial action.

All evaluation is based on assumptions, for example, that certain knowledge is significant, that individuals should be able to perform certain mental operations, and that some skills have intrinsic value and wide application. Assumptions about the particular contributions of geographic studies to the education of students are implicit in this guideline. To meet the objectives of the guideline, students will need practice in performing a variety of mental operations such as recall, interpretation, analysis, and synthesis. Similarly, if a level of skill proficiency is to be attained, they will require practice in skills such as sketching and drawing.

Teachers will recognize that there are degrees of difficulty in both mental operations and skills. One can recall the capital of Saskatchewan or the terms of the joint agreement to develop the Columbia River. For some students, drawing a map to provide a synthesis of information about their own neighbourhood might be difficult; other students may be capable of defending a decision based on their examination of the advantages and disadvantages of a proposed forest industries complex. To evaluate well, teachers must apply their talents to the development of personal competency in evaluation theory and practice. A number of sources on this topic are listed in the section on Teacher References in this guideline.*

Studies in geography should promote the formation of positive attitudes and values. Throughout the course descriptions in this guideline, topics or questions that encourage discussion of values questions and the use of values clarification techniques are included. (Teachers will find sources of information on appropriate techniques listed in the following section on Teacher References.) While opportunities for development of attitudes and values should be an integral part of studies, the results of attitudinal change are not easy to evaluate. Their importance lies in patterns of behaviour towards the environment that will be internalized and become lifelong habits.

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*Teachers can also refer to *Evaluation of Student Achievement: A Resource Guide for Teachers* (Toronto: Ministry of Education, 1976).

Teacher References

Bacon, Philip, ed. *Focus on Geography: Key Concepts and Teaching Strategies.* Washington: National Council for the Social Studies, 1970.

This series of readings by U.S. college professors is divided into two parts: (a) concepts and techniques; (b) teaching and learning. The ideas would be useful to teachers planning curriculum.

Bale, John; Graves, Norman; and Walford, Rex, eds. *Perspectives in Geographical Education.* Edinburgh: Oliver and Boyd, 1973.

A collection of papers on "Geography and Education", "Geography in Primary Education", "Geography in Secondary Education" and "The Curriculum in Geography" compiled by a team of British geographers. Each article is accompanied by questions for discussion by teachers.

Ball, John M.; Steinbrink, John E., and Stoltman, Joseph R., eds. *The Social Sciences and Geographic Education: A Reader.* New York: John Wiley and Sons, 1971.

Many worthwhile articles are included in this collection of readings. The sections on concepts, methods, teaching models, and geography in the curriculum are especially useful.

Beyer, Barry K.; and Penna, Anthony N. *Concepts in the Social Studies.* Washington: National Council for the Social Studies, 1971.

An inexpensive publication of the N.C.S.S. that provides readings from a variety of sources that help to clarify the meaning of concepts in education.

Briggs, K. *Fieldwork in Urban Geography.* Edinburgh: Oliver and Boyd, 1970.

A short explanation of the principles of urban geography is followed by a number of British examples of methods of field work. The maps, charts, and survey schemes are clearly illustrated and provide a basis for a variety of studies.

Cole, Richard A. *A New Role for Geographic Education: Values and Environmental Concerns.* Portland, Oreg.: National Council for Geographic Education, 1974.

This is a small manual that outlines a role for values questions in geography, describes basic objectives of the values clarification process, and provides examples of values clarification techniques for the classroom. The National Council for Geographic Education, 115 North Marion, Oak Park, Illinois 60301, U.S.A., provides complete listings of current publications on request.

Cross, M.F., and Daniel, P.A. *Fieldwork for Geography Classes.* London: McGraw-Hill Book Co., 1968.

Although the illustrations and examples are British, this book presents simple but practical explanations of both urban and rural field-study techniques. Topics include mapping, sketching, diagrams, charts, graphs, and transects.

Gopsill, G.H. *The Teaching of Geography.* London: Macmillan and Co., 1973.

This is the rewritten and revised fourth edition of the book. It is an aid to the teacher in modern techniques in the teaching of geography. Details of modern aids and lists of suitable equipment are included.

Graves, Norman J. *Geography in Education.* London: Heinemann Educational Books, 1975.

In ten chapters, the author summarizes current thought on geographic education from his perspective as chairman of the I.G.U. Commission on Geography in Education 1972-76. The book allows teachers to become up-to-date on a number of topics including aims, curriculum development, and evaluation.

Gunn, Angus M., ed. *High School Geography Project: Legacy for the Seventies.* Montreal: Centre Educatif et Culturel, 1972.

Subtitled "An Analysis of the High School Geography Project in Relation to New Developments in Geographic Education Worldwide", this is a collection of readings by the editor and others explaining the purpose and organization of the project.

Latour, Lawrence W. *Inquiry Experiences in Geography* (annotated teachers' edition). Lexington, Mass.: Ginn and Co. (Xerox Corp.) 1973.

The author provides over seventy exercises using inquiry techniques, organized into nine chapters. Most exercises are well suited to Intermediate students.

Marsden, W.E. *Evaluating the Geography Curriculum.* London: Longman Group Ltd., 1976.

This is a text designed for practising teachers and teachers-in-training. Geographical education is related to curriculum development and attention given to the provision of frameworks for devising course units and geography curricula.

Monkhouse, F.J. *Dictionary of Geography.* London: Edward Arnold, 1974.

This new edition of a standard reference book contains 572 new entries, principally reflecting the geographer's increasing interest in quantitative modes of study, and a more generous treatment of urban geography.

Ryan, Frank L. *Exemplars for the New Social Studies.* Englewood Cliffs, N.J.: PrenticeHall, 1971.

This book goes beyond the usual description of new concepts and techniques for educators to actually involve its readers in a number of new strategies. Sections of the book deal with decision making, simulation games, and strategies for questioning.

Salmon, R.B., and Masterton, T.H. *The Principles of Objective Testing in Geography.* The Principles of Objective Testing Series. London: Heinemann Educational Books, 1974.

Written in simple, clear terms, this book devotes the first few chapters to discussion of objectives, then provides practical assistance in developing a variety of objective test items. Many sample test items are included to illustrate the principles.

Sanders, N.M., *Classroom Questions: What Kinds?* New York: Harper and Row, 1966.

Of particular use to classroom teachers, this small book first describes one taxonomy of cognitive objectives. Subsequent chapters illustrate how each category of objectives can be tested through questioning techniques.

Senathirajah, Nallamina, and Weiss, Joel. *Evaluation in Geography.* Toronto: The Ontario Institute for Studies in Education, 1971.

This book focuses attention on defining educational objectives in geography. Suggestions are given for constructing tests, interpreting data, and reporting student progress.

Symonds, Hilda, ed. *The Teacher and the City.* Toronto: Methuen Publications, 1971.

The book presents urbanization as a positive and creative process to young people; it views the city in terms of prospects and opportunities rather than its problems.

Walford, Rex. *Games in Geography.* Toronto: Longman Canada Limited, 1970.

This small paperback describes the theory of gaming and follows with six examples of games in geography. Some classroom experiences with games are described.

———. *New Directions in Geography Teaching.* London: Longman Group Ltd., 1973.

A summary of presentations made at the Charney Manor conference on geographic education held in 1970, this book includes teaching units and presentations on new developments in geography.

Williams, Michael, ed. *Geography and the Integrated Curriculum: A Reader.* London: Heinemann Educational Books, 1976.

This book contains essays by British educators, written as early as 1913 and as recently as 1974. The consistent theme is the nature and purpose of geography in the school curriculum.

Wisniewski, Richard, ed. *Teaching About Life in the City.* Washington: National Council for the Social Studies, 1972.

The yearbook examines key aspects of our urban society to identify issues that must be central to all teaching about the city, and presents specific ideas on how teachers can deal with issues in the classroom.

Wood, C.J.B. *Handbook of Geographical Games.* Western Geographical Series, vol. 7. Victoria, B.C.: Department of Geography, University of Victoria, 1973.

An introductory chapter provides information on the theory and development of simulation games. An outline of five games is given.

Teachers seeking help in assembling teaching resources may find the following information useful:

Circular 14, Textbooks is published annually by the Ministry of Education and distributed to Ontario schools. The choice of textbooks should be made after study of the materials listed in *Circular 14* and its supplements.

A number of periodicals and annual publications have proven useful either for student or teacher reference. Schools may wish to subscribe to these and include them in school resource centres. A brief annotated list is presented below. Many schools find it worthwhile to obtain selected trade magazines and business letters as well. These often include current information that is pertinent to school programs.

Canadian Geographical Journal. Royal Canadian Geographical Society, 488 Wilbrod Street, Ottawa K1N 6M8.

Each monthly issue deals with a few selected topics in geography. Most topics relate to Canada and can be read easily by students.

The Geographical Magazine. I.P.C. Magazines Ltd., 66-69 Great Queen Street, London WC2E 5DD.

Published monthly, this magazine contains illustrated articles of wide-ranging interest. Easily read by students, it includes book reviews and articles on current events that will be of interest to teachers as well.

Journal of Geography. National Council for Geographic Education, 115 North Marion Street, Oak Park, Illinois 60301, U.S.A.

This monthly journal contains information that is of interest primarily to teachers. Articles often deal with geography as a discipline and as a school subject.

The Monograph. Ontario Association for Geographic and Environmental Education, Business Manager, c/o Jarvis Collegiate Institute, 495 Jarvis Street, Toronto M9R 1K1.

The Monograph is published quarterly and contains articles and features of specific interest to Ontario teachers.

The UNESCO Courier. United Nations Educational, Scientific and Cultural Organization, Publishing Centre, Supply and Services Canada, Ottawa K1A 0S9.

A monthly publication, this magazine provides illustrated articles of wide-ranging interest. It is particularly valuable for a world view of many environmental and social issues.

Teachers in search of current information may wish to recommend the inclusion of a number of the following publications in the resources of the school:

Canada: The Official Handbook of Present Conditions and Recent Progress (current edition). Publications Distribution, Statistics Canada, Ottawa K1A 0T6.

Each year this inexpensive publication gives a concise view of recent social and economic developments in Canada. The simple statistics and graphs are often useful to teachers.

Canada Year Book (current edition). Publications Distribution, Statistics Canada, Ottawa K1A 0T6.

This large volume provides accurate information on many aspects of Canadian affairs. Much of the information has applications in geography courses.

Information Please Almanac Atlas and Yearbook (current edition). New York: Simon and Schuster.

Maps, statistics, and informed opinion are included in each edition. The scope of interest is worldwide, but the presentation reflects an American viewpoint.

The Statesman's Yearbook (current edition). Toronto: Macmillan of Canada.

This volume provides current facts and figures of the world's nations.

The World Almanac and Book of Facts (current edition). New York: Newspaper Enterprise Association.

A useful source of facts and statistics, this volume provides a handy reference for teachers and students.

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